ABSTRACT OF A

Clinical Lecture

ON THE

CONNEXION BETWEEN SCARLET FEVER AND HEART DISEASE.

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GENTLEMEN,—In taking the medical histories of our patients here, we often find that parents will insist that their children "have never been well since they had scarlet fever," and there is often much truth in this, inasmuch as this fever is apt to leave behind it not only enfeebled health, but various sequelæ which may be a source of annoyance or even risk for many years. On the other hand, an attack of scarlet fever, with its danger to the patient and inconvenience to the household, is likely to impress itself on the memory of parents, and is apt to get the discredit of after-coming troubles, with the production of which it may have had no share. Scarlet fever has been blamed in a casual and indefinite sort of way with giving rise to heart disease, and it may be worth while for us to review the subject by the light of the clinical and pathological records of nearly 900 cases which have passed through the scarlet fever wards of this hospital during the last five years.

The first question that naturally suggests itself when considering this connexion is—What relation does rheumatism bear to scarlet fever, or rather what part does the virus of the fever play in exciting or predisposing to an attack of rheumatism? Misconceptions here are very easy, for the commonest form of joint affection which complicates scarlet fever in children is a form of synovitis which is doubtfully rheumatic in character and is not often accompanied by endocarditis. In twenty cases of scarlatinal synovitis which have come under my care, in no one was there evidence of endocarditis, though in one there was a temporary pericarditis and in another pleuro-pericarditis. These attacks differ in several ways from acute or subacute rheumatism; they are more fugitive in character, rarely recurring or returning to a joint when once it has left, and exhibiting an especial tendency to attack the synovial membranes on the backs and palms of the hands, finger-joints, soles of the feet, and cervical vertebræ. The attacks mostly take place from the seventh to the ninth day of the fever. Nearly all these attacks of synovitis occur in cases in which the temperature is maintained longer than usual on account of severe inflammation of the cervical glands or ulceration of the tonsils or palate. These attacks of synovitis are certainly commoner in some epidemics than in others. But, apart from synovitis, attacks indistinguishable from true rheumatism are liable to occur at the end of the third or during the fourth week, much at the time that nephritis is liable to supervene. My own experience is that this post-scarlatinal rheumatism is commoner in young adults than in children, and indeed I believe it to be rare among the latter. Endocarditis is by no means uncommon in these attacks. It also happens that an attack of scarlet fever occurring in a patient convalescent from rheumatism has given rise to a relapse. I have seen this on several occasions among children who have been admitted to the general wards for subacute rheumatism, and who have contracted scarlet fever. In three of my cases pericarditis or joint pain occurred within a few days of the onset of the fever. In what way the poison of scarlet fever determines a relapse in these cases I am unable to say; I can only record the fact.

There is another complication of scarlet fever which is, I believe, a not infrequent cause of cardiac lesions, and that is nephritis. Probably a certain amount of dilatation of the left ventricle, with more or less compensatory hypertrophy, occurs in most cases of scarlatinal nephritis of any severity, and may certainly take place within a week, as can be demonstrated by examination of the apex beat. Both endocarditis and pericarditis may take place, and embolism occasionally occurs. Peri-endocarditis may also accompany the pyæmia which occasionally complicates scarlet fever; but as these cases are almost certainly fatal, it can hardly be said to produce heart disease. It will perhaps be worth while to refer separately to the different lesions which may occur.

Pericarditis.—The tendency to the production of pericarditis in uncomplicated cases of scarlet fever is not great. Litten has stated that dry pericarditis of short duration, without complaint of pain or any very obvious symptoms, is commoner than is supposed; and in this I am inclined to agree with him, as on several occasions I have noted a pericardial rub, lasting a few days and again disappearing without any signs of effusion. In two of my cases of scarlatinal synovitis there was a pericardial rub detected, and in one there was evidently some local pleurisy. In three cases of undoubted rheumatism already referred to, two of which were convalescent from an attack when scarlet fever supervened, suffered from pericarditis within a week of contracting the fever, and all three died in the course of a few weeks. All had suffered from chronic heart disease prior to the attack. Pericarditis also occasionally accompanies both pleurisy and mediastinitis in connexion with the septicæmic state so common in severe cases of scarlet fever. Thus it not infrequently happens that, in fatal cases attended with much suppuration of glands and cellulitis about the neck, pus burrows downwards from the deep cervical glands into the anterior mediastinum, and an effusion of lymph takes place in this situation, and possibly also a suppurative pericarditis or empyema. If recovery take place in such cases, this inflammatory process in the mediastinum may lead to matting and cicatrisation of the fibrous tissue and consequent pressure on the great vessels, especially the inferior vena cava and hepatic veins, giving rise to impeded hepatic circulation and perhaps hypertrophic cirrhosis. Pericarditis occasionally occurs in nephritis.

Endocarditis.—There is very little post-mortem evidence of endocarditis occurring in cases of scarlet fever dying during the course of the disease itself. I have examined the heart in upwards of 100 fatal cases of scarlet fever, and have never seen either endocarditis or pericarditis in any case uncomplicated with nephritis. The edges of the mitral valves are mostly irregular and nodular, and more or less thickened, probably in consequence of a swelling of the fibrous tissue elements between the layers of endocardium, but the surface of the latter is smooth and shiny, and has evidently not been the seat of endocarditis. The above condition is by no means uncommon in other febrile states, and is not peculiar to scarlet fever. This experience, I believe, agrees with others, though both Litten and Henoch have published cases in which ulcerative endocarditis was found post mortem associated with caries of the petrous portion of the temporal bone, purulent meningitis, thrombosis of veins, and pyæmic abscesses, complicating scarlet fever. If the post-mortem evidence is negative, what facts can be gathered from clinical observations? It must have occurred to all who have seen much of scarlet fever, or indeed of any febrile disease in children, to note murmurs, or at least abnormal cardiac sounds, during the height of the fever, which for the most part are systolic, are heard best in the mitral area, but also at the base, but not in the axilla. The first sound at the apex is frequently elongated, or not so clear and distinct as normal. Some authors have not hesitated to claim these bruits or murmurish first sounds as evidence of a scarlatinal endocarditis. Thus Picot, in the article on Scarlatina in the *Nouveau Dictionnaire de Médecine et Chirurgie*, says, in speaking of endocarditis, "the attacks are light, readily escape observation, and are easily healed." When some years ago I began to constantly examine the hearts of scarlet fever patients, I was struck with the frequency of abnormal heart sounds, and believed at first they were due to endocarditis. But the evidence afforded by the post-mortem room, and the careful following up of cases during convalescence, convinced me that the murmurs heard were only functional, and, whatever might be their cause, they were not due to an organic lesion. There are, however, a few cases on record in which the evidence is tolerably strong that endocarditis did occur during the course of, or during convalescence from, an attack of scarlet fever. Thus Litten[1] relates the case of a man aged twenty-one, who was admitted to hospital on the eleventh day of an attack of scarlet fever;

[1] Charité Annalen, vii., p. 136.

he appears at this time to have been convalescent, and his principal complaint seems to have been perforation of the membrana tympani; fourteen days afterwards he complained of pain in the chest with feverishness, and the day following a pericardial friction sound was heard; three days later this had disappeared, and a systolic bruit was heard at the apex; this latter persisted, and two years later the patient was evidently suffering from chronic valvular disease. It must, however, be noted that the endocarditis in this case occurred during the fourth week, which is the usual time for post-scarlatinal rheumatism to supervene. Henoch mentions in his lectures the case of a boy, aged six years, who developed a systolic bruit at the end of the second week of an attack of scarlet fever, which remained for two months and then disappeared.

I have already referred to the fact that in cases of scarlatinal synovitis, although bruits were heard in several of them, these were only temporary, and afforded no sufficient evidence of endocarditis. Endocarditis does unquestionably occur in the post-scarlatinal rheumatism, which sometimes supervenes during the third or fourth week of the attack of the fever, and when the patient is fully convalescent. In two cases of malignant endocarditis under the care of my friend, Dr. Massiah, of Didsbury, in which the joint symptoms were slight but the cardiac severe, which followed during convalescence from scarlet fever, fatal results occurred in the course of four or five weeks. Ulcerative or malignant endocarditis, either with or without joint pain, seems occasionally to follow scarlet fever.

Endocarditis is undoubtedly a not infrequent complication of scarlatinal nephritis. I have noted this post mortem in three cases. In one of my cases an anæmic girl of nine years was admitted with albuminuria and œdema of face, with a history of a previous attack of scarlet fever. There was præcordial pain, dyspnœa, and a loud, almost musical, systolic bruit; there was also an enlarged spleen and intermittent fever. Shortly before her death she suffered from severe pain in the head, paresis of the right arm, optic neuritis, and retinal hæmorrhages. At the post-mortem the kidneys were enlarged, the cortex pale and fatty; there was extensive endocarditis, the mitral valves and posterior wall of the left auricle being covered with granulations, and a small aneurysm, evidently embolic, on the left middle cerebral artery. In a second case, which died three weeks after the onset of the nephritis, a deep ulcer was found involving one aortic valve; no bruit had been heard during life. In a third case, of a girl aged six years, who died three weeks after the onset of the nephritis, both pericarditis and endocarditis, the latter consisting of nodules of fibrin on the aortic valves, were found. A pericardial friction sound, but no distinct murmur, was heard during life. In addition to the post-mortem evidence of the existence of endocarditis in scarlatinal nephritis, there is the hardly less convincing evidence afforded by clinical observation, more especially that of the onset of hemiplegia due to embolism coming on during convalescence. Such cases have been recorded by Bristowe,[2] T. Barlow, Semple, and Finlayson. In Semple's case[3] the hemiplegia seems to have supervened some twelve weeks after the onset of the nephritis, and when the patient had been up and about. It is important to note that murmurs were not to be heard in several of these cases. In several of my cases of nephritis bruits have been detected during life and endocarditis diagnosed, but no endocarditis found at the post-mortem, only a dilated left ventricle. In other cases which recovered murmurs were also existent, and which were present when they left the hospital. It is not certain what is the cause of endocarditis in acute nephritis; the uræmic condition of blood seems to predispose to inflammation of serous membranes—as the pleura, pericardium, and peritoneum; and the high tension in the bloodvessels, by bringing about a "banging" action of the valves, would seem to give rise to a greater irritation of the endocardium than during their normal closure.

Degeneration of the muscular walls. — In most fatal cases of scarlet fever the muscular walls of the heart are pale and flabby, and the endocardium on the musculi papillares and interior of the ventricles is mottled in appearance, presenting typical "tabby cat" degeneration. The paleness of the walls is due to the presence of minute particles of fatty or granular matters in the muscular fibres, a change very similar to that occurring in all the organs. I have not seen any cases with the indurated or leathery condition of the heart muscle described by Litten.

Dilatation and hypertrophy of the heart without valvular lesions.—In long-continued pyrexias the muscular walls of the heart are apt to be damaged, and the cavities in consequence to become dilated. That this occurs to some extent in scarlet fever is probable, such hearts being found pale and flabby, and the cavities apparently having yielded more or less when contracting on their contents, though I have never seen any marked dilatation or hypertrophy. When, however, in addition to a disturbed nutrition of the muscular fibres, the blood-pressure rises as it does in acute nephritis, there is a frequent and very marked yielding of the walls of the heart, so that the cavities become dilated. As the high tension in the vessels affects all the cavities more or less, they are all found more or less dilated, though naturally the cavity to suffer most is the left ventricle. The amount of hypertrophy which follows depends upon the chronicity of the case and the nutritive powers of the patient. The full significance of this cardiac dilatation and its tendency to produce dyspnœa and sudden death has only been recognised by recent writers, such as Goodhart, Friedländer, and Silbermann. In the most severe cases of nephritis, dilatation may take place very quickly, so that it may be possible in the course of a few days or weeks to see a marked change in the position of the cardiac impulse, the impulse being first noted inside the nipple line, then actually on the line, and later still outside. This dilatation may occur without the presence of a murmur, though in other cases I have noted murmurs when the post-mortem showed there was no endocarditis. There can be little doubt that this dilatation occurring during an attack of nephritis may be perfectly recovered from, the cavities returning to their normal size after the nephritis has passed away and the health completely restored. This is illustrated by one of my cases, a boy of eleven years, who was admitted with acute scarlatinal nephritis, in whom the cardiac dulness was increased in breadth, the apex beat being diffused in the sixth and seventh spaces, partly external to the left nipple line, and who had attacks of orthopnœa, especially at night, with a cantering action of the heart. Later there was some basic pneumonia, much enlargement of the liver, and temporary amaurosis. There could be no doubt that both sides of the heart were dilated. He finally recovered under the use of digitaline and ether given subcutaneously. The albuminuria gradually disappeared, and when seen two years and a half afterwards he was doing heavy work in a shop, and an examination of his heart showed that the cardiac dulness and apex beat were normal. In another case, that of a boy aged eleven years, who was admitted with acute nephritis, after having walked a couple of miles to the dispensary, dyspnœa set in a few hours after admission, which quickly ended fatally. At the post-mortem all the cavities of the heart were dilated, and there was no endocarditis. In another case, that of a boy aged six years, admitted with acute nephritis, the cardiac dulness extended one inch to the left of the nipple line; the impulse was diffused, partly in the epigastrium and partly in the left nipple line, and there was a well-marked murmur heard at the apex and in the axilla. Two days after admission he was seized with urgent dyspnœa, vomiting, pallor of the face, and much distress, and died in a few hours. At the post-mortem both sides of the heart were dilated, the walls of the ventricles were very thin and pale, and there was no endocarditis or valvular lesion. Such cases are far from uncommon, cases being reported by Goodhart, Silbermann, and Baumgarten, and I have myself seen nine or ten, which ended fatally. Various authors have ascribed the symptoms and fatal issue to œdema of the lungs or thrombosis of the pulmonary artery. That general œdema is very often present is certain, but it is not always so, and œdema of the lungs is clearly not the primary cause of the fatal issue, but is the result of the gradually failing heart. The pathology of such cases is tolerably clear: the nutrition of the heart suffers in consequence of the uræmic and anæmic condition of the blood, while it has to carry on the circulation with an obstruction to the passage of blood through the arterioles of the kidney and elsewhere. The heart is like a badly fed and over-driven horse, who first staggers under the weight of its load, and then suddenly falls exhausted beneath it.

To sum up the connexion of scarlet fever with heart disease I may submit the following:—1. In uncomplicated cases of scarlet fever lesions of the heart are very rare.

[2] Theory and Practice of Medicine, 4th edition, p. 1042 (note).
[3] Medical Press and Circular, Dec. 3rd, 1884.

2. Endocarditis is quite exceptional in scarlatinal synovitis; pericarditis occurs more frequently. 3. Acute or subacute rheumatism occasionally supervenes during convalescence from scarlet fever; an attack of scarlet fever may also be the exciting cause of a relapse; in such attacks peri-endocarditis is frequent. 4. Peri-endocarditis occasionally occurs in scarlatinal pyæmia. 5. Dilatation without valvular disease very frequently occurs in scarlatinal nephritis; peri-endocarditis and embolism are by no means uncommon.

TWO CASES OF AMPUTATION OF THE PENIS FOR EPITHELIOMA,

BY PEARCE GOULD'S MODIFICATION OF THIERSCH'S OPERATION.[1]

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THE following two cases were admitted under my care at the Cancer Hospital. They were both men over seventy years of age, and in very enfeebled health. One man was operated upon on Dec. 8th, 1885, and the other as lately as Feb. 9th of this year.

CASE 1.—J. W——, aged seventy, a compositor, was admitted into the hospital on Dec. 5th, 1885, suffering from epithelioma of the penis. Five years ago he had ulcers on his legs; otherwise he has enjoyed fairly good health until two years since. No specific history. Has been a hard drinker. Father and mother died of old age; an uncle on the father's side died of cancer of the mouth. Seven months previously the patient first noticed a small red pimple on the lateral aspect of the middle of the penis, which has grown very rapidly until the present time. Experiences very great pain, but has no difficulty in micturition.

State on admission.—He has a large fungating and offensive growth on the penis, reaching quite to the root; the glands in the groins are slightly enlarged—none, however, larger than a small bean; and as these are so in both groins, probably they are only sympathetic, but not diseased. The patient is much debilitated in health, and has chronic bronchitis; he is most feeble and decrepid; notwithstanding this, however, as the disease is giving him so much pain, and there is considerable discharge of a most offensive character, it was decided to remove the diseased organ.

On Dec. 8th, the patient, being fully under the influence of ether, was placed in the lithotomy position, the legs being supported by Clover's crutch. The pubes being shaved, a circular incision was made round the root of the penis, and another incision extended from the lower part of this along the line of the raphé of the scrotum well into the perineum, and the two halves of the scrotum separated quite down to the root of the penis. A catheter was now passed into the bladder, and the corpus spongiosum divided about an inch and a half above the bulb by passing the blade of a knife between it and the corpora cavernosa. The catheter being removed, the urethra was divided from behind forwards. The corpus spongiosum with the urethra were now dissected carefully from the body of the penis as far back as the triangular ligament. This part of the operation being finished, I seized the penis and dragged it well forwards and downwards, and with a pair of scissors divided the suspensory ligament and tissues around, as far as the rami of the pubes. I then with a periosteal raspatory separated the crura from their attachments. The whole body of the organ now being removed, I caught up and ligatured the few bleeding vessels. The hæmorrhage, however, in both this and Case 2 was quite insignificant. The urethra was next slit up on its under side for about half an inch, and carefully stitched to the lower angle of the wound. Having washed the wounded surface out with a solution of carbolic acid, and dusted the raw surface over with iodoform, I inserted a drainage-tube in the lower angle, and united the margins of the wound with a few interrupted sutures and a continuous horsehair suture. The parts were then dusted over with iodoform and enveloped with salicylic wool, and the patient returned to bed.—Dec. 9th: Patient has passed a good night and micturated twice. No catheter was introduced into the bladder, and the man has complete control over his urine.—10th: He passed a bad night, due to excessive coughing, and also has great pain in passing urine, but no difficulty. Temperature last night 101°, but has fallen this morning to 100°. The scrotum is becoming discoloured (ecchymosed). He continued to improve from this time, and on the 15th the stitches in the upper part of the wound were removed. In the centre of the incision is a small slough, but the rest of the wound looks healthy, and at the upper part it has united by the first intention; there was some slight cellulitis, which has, however, all disappeared, and the whole part looks healthy, with the exception of the urethra and corpus spongiosum, which are sloughing.—28th: Wound has quite healed excepting where the slough came away at the lower angle; here there are healthy granulations; the corpus spongiosum has entirely sloughed away.—Jan. 10th: There is a hard painful swelling between the urethra and anus, evidently containing pus, probably due to urinary infiltration; this was freely opened, and a quantity of pus escaped; pus also flowed from the orifice of the urethral opening, and on injecting a solution of sulphurous acid into one opening it escaped by the other. The opening in the perineum gradually closed, and the urine now flows in the newly formed channel. The man is now quite well, but owing to the sloughing of the corpus spongiosum there is some contraction of the urethra; this, however, I do not at present intend to interfere with.

May 12th.—I saw this man a few days since. The wounds are almost imperceptible. He passes urine in a good stream. There is no sign of recurrence, and the glands in the groins have disappeared.

CASE 2.—J. W——, aged seventy-four, butler, was admitted into the Cancer Hospital on Feb. 8th, 1886, with epithelioma of the penis. He has been a healthy man. No specific history. Mother's relatives phthisical. Has had contraction of the prepuce all his life. No history of cancer in his family. On account of the contraction of the prepuce he had it slit up some twelve years ago. Six months since the patient noticed a small spot near the frænum, and consulted a medical man, who applied caustic to it, which appeared to reduce the growth, but it rapidly increased afterwards. Has had a good deal of pain and irritation from it.

State on admission.—There is an ulcerating mass extending over the glans penis and partly down the body of the organ; it does not interfere with micturition, but is very painful. The base of the mass is hard, and the surrounding parts deeply indurated. The inguinal glands are not affected. He has an old inguinal hernia on the right side, for which he wears a truss.

On Feb. 9th, the patient being placed under ether, the penis was removed by an operation similar to that described in the last case.—10th: There was a good deal of oozing during the night, and this morning there is a quantity of blood-clot between the lips of the wound. Temperature 101°. Patient can pass urine quite freely, but complains of frequent desire to micturate.—11th: Scrotum a good deal discoloured. There is no sign of any sloughing. The patient still complains of great pain and frequent desire to micturate.—12th: Temperature normal. Has slept well. Pain during micturition less, and desire not so frequent. Swelling of scrotum subsiding, and natural colour returning. The stitches at the lower part of wound have given way, and a small slough has formed.—18th: Some considerable sloughs have come away from the wound, and there is a good deal of discharge.—24th: The lower part of the wound now looks healthy and is granulating well. Micturition causes no pain, although the desire to pass urine is somewhat frequent; but probably this is not more so than is to be anticipated in a man of his age.—March 15th: Discharged. Wound healed, and the patient is able to pass urine without difficulty.

Remarks.—These two men are now convalescent. The patient in Case 1, when I first saw him, was a miserable-looking man, completely worn out by chronic bronchitis, pain, and the profuse stinking discharge from his penis. His cough, which was most troublesome, has now considerably improved, and, in fact, he hopes shortly to return to his employment. Mr. Pearce Gould's case, reported in THE LANCET of May 20th, 1882, and these two are the oldest patients on whom I have been able to find this form of operation performed, and although in the first case I hesitated before subjecting the man to such a severe operation, yet I felt that if left alone he would gradually succumb to the disease. The best plan of dealing with the urethra in all cases of amputation of the penis has been a vexed question from time immemorial,

[1] Paper read at the meeting of the Medical Society of London, March 22nd, 1886.

and although many suggestions have been made so as to prevent its retracting when dealt with in conjunction with the stump of the amputated penis, it was not until Professor Thiersch, of Leipsig, adopted the plan of bringing the urethra through an opening in the perineum that any real advantage was obtained. The operation, as suggested and practised by this surgeon, was planned with a view of splitting the scrotum down the middle, sufficiently far to allow of his dissecting the urethra and corpus spongiosum away from the body of the penis, and then making a button-hole in the perineum about an inch and a half in front of the anus, bringing the divided urethra through the opening and fixing it there by a few sutures. He then contented himself with slicing the corpora cavernosa off close to the pubes and stitching up the wound. This operation has been performed by many English surgeons[2] with marked success, and undoubtedly the position of the urethra in the perineum has been the source of the greatest comfort to patients who have had the misfortune to be obliged to part with this important organ. Sir William Mac Cormac in February of last year showed a man at the Medical Society of London in whom he had amputated the penis in this fashion, and he has lately published five other cases, in all of which the most favourable results have been obtained. Mr. Wheelhouse, of Leeds, has also recently published two cases in which he had operated in a similar manner with equally happy results. We have, then, eleven cases here recorded of this method of amputation, all of which have been successful.

Mr. Pearce Gould, however, is the first surgeon who seems to have recognised the importance of removing the whole corpora cavernosa from their attachments to the rami of the pubes and ischium, and in order to accomplish this he suggested a slight but important modification of Thiersch's method, so as to enable him to have sufficient room to more readily detach the crura of the corpora cavernosa. He therefore adopted the plan of splitting the scrotum completely from the root of the penis to the perineum and as far back as the triangular ligament. By this means the body of the penis is brought into view for its whole length, and after about an inch and a half of the corpus spongiosum with the urethra are dissected from the cavernosa there is no difficulty in detaching the crura from their attachments by means of a raspatory. The urethra then is split along the lower border and fastened to the lower angle of the incision, as described above. I think this operation of Mr. Gould's is founded on more scientific grounds than that of Thiersch, because there is infinitely less likelihood of the disease recurring in the cicatrix or stump if the whole of the corpora cavernosa are removed than if the root of the penis is allowed to remain, and I consider this operation is a very decided advance in the surgery of these parts. In my first case the corpus spongiosum sloughed and caused great difficulty in keeping the opening for the passage of the urine patent. This may probably be accounted for by the age and debilitated condition of the man. It is a noticeable fact that both patients had complete control over their bladders from the time of the operation, and in neither case did I introduce a catheter at the time of the operation.

One important question, I think, arises in these operations of the removal of the penis in middle-aged or young men, and that is, What course should the surgeon adopt in regard to the testes? Mr. Wheelhouse has drawn attention to this point in the two cases he has recorded: in one the testes were involved in the disease, and were removed at the same time as the penis; in the other, the testes were free from disease and were left. These two men were inmates of the hospital at the same time, and occupied adjoining beds, and therefore had an opportunity of comparing notes. The one in whom the testes were removed made an uninterrupted recovery, and expressed himself as feeling completely relieved in every way; the other, however, although he made a good recovery, was a martyr to the physiological action of his testes, which were a constant source of annoyance to him, and he still remains a prey to desires which he can never gratify. I think everyone will admit that the condition of the former patient was certainly more satisfactory and perfect than the latter. This perhaps is one drawback to the special form of operation now being discussed, as by the old method, so long as any portion of the penis remained, the question of removing the testes need not arise. On the other hand, however, I am strongly of opinion that the immunity from recurrence in the stump is of far more importance than this minor inconvenience to the patient. Therefore, in performing amputation of the penis in men under fifty years of age, this point should be fully laid before them; and as the risk to life by loss of the testes is not materially increased, we should rather advise their removal. As to the advantages of bringing the urethra through the perineum, they are so manifest that they require little comment from me. There is no doubt that the comfort of the patient is considerably enhanced by having the opening of the urethra in such a position that he can sit down in comfort, and micturate without the urine passing over his scrotum and thighs. In one of Sir W. Mac Cormac's cases the patient even got over the difficulty of having to sit down to urinate, as he contrived a tin pipe like the spout of a teapot which fitted comfortably underneath between his legs, and there was not the slightest difficulty in passing urine in the ordinary manner. No doubt, therefore, surgical instrument makers can easily contrive something of a similar fashion.

I think the operation as suggested by Mr. Gould and practised by me in these two cases has this advantage over Thiersch's operation—that it enables the surgeon to make a complete dissection down to the triangular ligament, thus giving ample room for detaching the crura of the corpora cavernosa from their attachments, allowing the deep parts to be thoroughly drained, and preventing any fear of bagging of serum or pus. Moreover, undoubtedly the fear of retraction or contraction of the urethra is not nearly so great as in the old operation of amputating the penis by a sweep of the knife, or of the more modern fashion of forming flaps to cover the end of the stump, and leaving the urethra sufficiently long to pass through and be fastened to them.

[2] I am reminded by Mr. Davies-Colley that Professor Humphry, of Cambridge, practised a similar operation to that described by Thiersch as early as the year 1870.

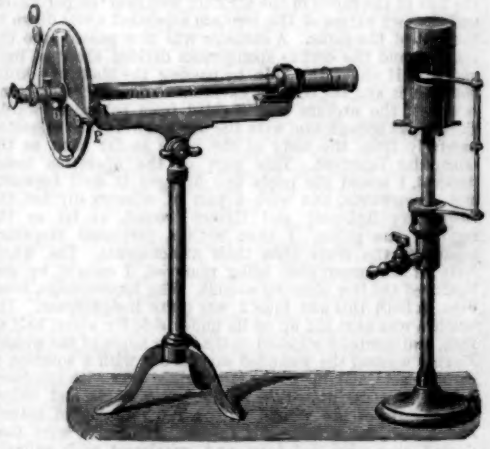
ON THE

COMMON ORIGIN OF DIABETES AND THE URIC ACID DIATHESIS.

BY DR. DEBOUT D'ESTREES,
OF CONTREXÉVILLE.

THAT diabetes and the uric acid diathesis have a common origin is not a new idea. The subject has been discussed by many writers, some upholding, others opposing, the theory. My own experience classes me with the first, because in all the cases of diabetes brought under my notice at Contrexéville since my appointment in 1868 I have seen the sugar during treatment give place to an excretion of uric acid.

FIG. 1.



Polarimeter or polariscope.

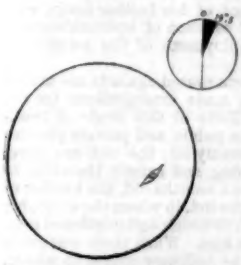
The examination of each sample of urine has on every occasion been carefully made by myself with both microscope and polarimeter (see Fig. 1), the latter instrument giving the proportion of contained sugar with the greatest

accuracy. Some of my last observations were made with Dr. Cruise, President of the College of Physicians of Ireland; and it is, indeed, at his suggestion that this paper has been written.[1]

Dr. Marchal de Calvi, in a work entitled "Observations sur les Accidents diabétiques," published in 1864, writes: "The most obvious factor in the morbid *processus* of diabetes is the influence of the uric acid diathesis," and my experience at Contrexéville leads me more than ever to share his opinions as to the connexion of diabetes with gout and gravel. The following cases will, I think, corroborate these views. They are taken from my last season's note-book, and refer exclusively to patients sent me by British and Irish physicians.

Mr. V——, a gentleman fifty-six years of age, came to me on July 8th, 1885. He had been suffering for three years from polyuria and polydipsia. His sight was affected, there was a loss of power in the lower limbs, and an almost total insomnia existed. There was no gout or gravel in his family. For six months before his arrival at Contrexéville he had been under the care of Dr. Chepmell, and the treatment, mainly dietetic, had reduced the quantity of urine

FIG. 2.



Microscopical examination: a single epithelial cell. Polariscopical examination: $19°5° = 42·90$ grm. of sugar per 1000.

FIG. 3.

Microscopical examination: some uric acid crystals. Polariscopical examination: $5° = 11·00$ grm. of sugar per 1000.

FIG. 4.

Microscopical examination: abundant crystals of uric acid. Polariscopical examination: negative; no sugar.

passed in the twenty-four hours from four pints and a half to three pints, with at the same time a fall in the specific gravity from 1045 to 1038. The amount of sugar per litre was 42 grammes (4·2 per cent.). There was no albumen and no deposit. The treatment consisted in drinking from one to two litres of water from the Pavillon spring in the course of the day, with the addition after July 15th of cold douches of short duration. On the 17th an examination of the urine passed at bedtime and on getting up in the morning showed a specific gravity of 1024, and ten grammes per litre (1 per cent.) of sugar, while with the microscope *crystals of uric acid were discovered for the first time.* (See Figs. 2, 3, and 4.) The quantity of mineral water consumed daily was doubled, and on August 3rd the polarimeter showed that no sugar existed, but a red deposit visible to the naked eye afforded evidence of the excretion of a large quantity of uric acid. The patient was then entirely free from thirst and insomnia, and before leaving Contrexéville was able to walk eight miles a day. A better idea of these changes will be obtained by reference to the drawings taken from nature by means of the camera clara.

If space permitted I could quote a great many cases like the above, but this would involve a vain repetition. I wish, however, to insist particularly on this clinical fact, that in *all* the cases of diabetes which I have treated at Contrexéville the diminution or disappearance of the sugar has coincided with the appearance or with the increase of uric acid crystals in the urine. At the same time the glycosuria may coexist with the excretion of uric acid, and of this clinical truth the following two cases are illustrative:—

Mr. M——, aged forty-six, a man of robust health, and weighing ninety-nine kilogrammes, came to me on the 2nd of June in consequence of pains in the loins, which had recurred at irregular intervals during the six preceding years, the attacks lasting five or six days. For two years he had suffered from violent thirst. Micturition was frequent, five or six times during the night. The urine on June 4th was amber-coloured, slightly cloudy, of specific gravity 1040, contained 10 per cent. of sugar, and the microscope showed that the cloudy deposit, simulating mucus, consisted exclusively of minute crystals of uric acid. On June 11th the specific gravity was 1022; quantity of sugar 2·5 per cent. On the 18th the specific gravity was 1015; no sugar, but abundant red uric acid sediment. The nocturnal micturition had ceased.

Mr. X——, an Australian gentleman, was sent to me by Dr. Cruise with the following diagnosis: Irritable bladder; no stone; a little sugar in the urine. Dr. Cruise, who came to Contrexéville during this patient's stay, was able himself to verify the results of my analyses. In the first sample examined on Aug. 12th, globules of pus, a few epithelial cells, and crystals of uric acid were seen under the microscope. On the 28th of the same month crystals of uric acid alone remained, all traces of sugar having disappeared, the specific gravity being 1015.

That a low specific gravity does not always imply absence of sugar, nor a high specific gravity prove its presence, are clinical facts of which I have seen many illustrations. Without going further back than last summer, I may refer to a patient of Dr. Ramskill's who came to Contrexéville on July 11th with urine of a specific gravity of 1031, containing crystals of oxalate of lime, but no sugar. By the 29th of the same month the specific gravity had dropped to 1015, and crystals of uric acid alone were visible.

Another case came under my observation on July 12th—a patient of Dr. Hermann Weber. The specific gravity of the urine was 1030; crystals of oxalic acid were also present, but no sugar; and here by Aug. 3rd the specific gravity had fallen to 1012, and uric acid crystals alone were to be seen.

On July 17th, in a patient of Dr. Matthew Baines, who was non-diabetic, I found a specific gravity of 1029 and a number of oxalic crystals. A like specific gravity existed in the urine of a patient sent me by Mr. Buxton Shillitoe on August 14th, and in both cases the high density disappeared and uric acid took the place of the octohedral crystals. I also saw the same change under the influence of the waters last season in a lady sent me from Paris; here the specific gravity was 1034, with oxalate of lime, but no sugar.

The inference must not, however, be drawn that a high specific gravity always accompanies crystals of oxalate of lime, for in a patient sent me last year by Sir Andrew Clark, suffering from marked symptoms of oxalic gravel, the specific gravity was only 1020, though the microscope detected quantities of oxalate of lime. Nor must it be inferred that a low specific gravity is incompatible with the presence of sugar—e.g., the case of a lady in whom in 1879, during an obstinate attack of bronchitis, Dr. Wilson Fox had detected diabetes, and made the subjoined urinary analyses in 1880 at Contrexéville:—

		Sp. gr.	Albumen.	Sugar.
Aug. 20th	Morning	1022	0·40	22·0 grammes
	Evening	1026	1·30	35·20 ,,
,, 26th	Morning	1015	0·30	15·40 ,,
	Evening	1017	0·50	17·60 ,,
Sept. 3rd	Morning*	1010	Traces	None
	Evening	1010	0·25	Traces

* Uric acid crystals appeared under the microscope.

This case tends to show that a comparatively low specific gravity does not always counter-indicate the presence of sugar, but as I purpose making a special clinical study of the subject of albumen in the urine, I will not here enter upon its discussion.

[1] I am aware that Dr. Cruise of Dublin is about to read a paper before the Academy of Medicine in Ireland on the Estimation of Sugar in Urine by the Polariscope, and I expect that his communication will shortly be published.

ON THE NATURE OF WHOOPING-COUGH;

WITH A DESCRIPTION OF A NEW MODE OF TREATMENT INTRODUCED BY PROFESSOR MONCORVO, OF RIO DE JANEIRO, AND ITS PRACTICAL RESULTS.

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(*Concluded from page 917.*)

THE idea of a parasitic origin for whooping-cough has been for a long time floating in the minds of physicians; and so long ago as 1867 I had myself, led to that way of thought by the then new doctrines of Lister and the results of his treatment of deep abscesses &c., treated large numbers of out-patients at the Manchester Hospital for Sick Children with carbolic inhalations, both in the form of spray (using a solution of 2 or 3 per cent.) and as vapour. But though the success was marked, circumstances occurred which caused me to discontinue this mode of treatment: the inhalation of the spray could not be effectually carried out, except under the supervision of a medical attendant, and in the case of hospital out-patients this was of course impossible; while the vapour was frequently allowed to become so strong as to produce great irritation, not only to the patient, but also to the healthy inhabitants of the house. Even when carefully regulated it was oftentimes too irritating to be borne, and in cases where there was bronchitic complication it was necessary at once to intermit the treatment. Indeed, the fatal result in a case complicated with broncho-pneumonia in a little relative of my own, and which seemed to me to be in a great measure due to the irritation caused by the vapour, was the immediate reason of my ceasing to use this means; this death took place in 1868. The practice common among the people of towns, of taking their children to the gas-works to inhale the vapours from the purifying tanks, points also in the same direction, and it is a common practice to inhale the fumes of gas-tar for the same purpose. Parrot[1] has used phenate of soda for the same purpose, and considers the carbolic acid as heroic, *if not specific*, in whooping-cough. Many other writers have used the carbolic acid and carbolates all over the world, and the results have always been favourable as to the whooping. In Belgium, Tordeus[2] has used benzoate of soda with success. Keuster has employed inhalations of thymol. The salts of quinine have been used with more or less advantage by many, particularly in America. Huebner found benefit from salicylate of soda, and Hildebrandt[3] from inhalations of petroleum vapour. All these experiences point in one direction, that of the parasitic origin of this disease; and all are more or less subject to one drawback, that when they are strong enough to be effectual as parasiticides they become injurious as irritants. It was this fact which led me so long ago to renounce the use of the most effectual among them, and it was this which led Professor Moncorvo, more happily, to that research which induced him to employ the substance I have already named, and the discussion of which I am about to enter upon. It is a congener of carbolic acid, which, however, is free from the irritating qualities of that substance. This is Resorcine, a substance which fills a position in the class of aromatics very near to that of carbolic acid. Andeer[4] and Calliss and Dujardin-Beaumetz[5] have borne witness to the remarkable effect which resorcine exercises upon the organic ferments, even in small doses; and indeed the latter assert its superiority to carbolic acid in that respect. There are also the advantages of the much greater solubility of resorcine, of its less caustic properties, of its very slight odour, and of its infinitely less toxic qualities—all which, together with the scarcely less important fact of its slightly sweet taste, combine to render it much more suitable as a topical application than carbolic acid. These properties had led Professor Moncorvo to employ it for internal administration in diarrhœa, dysentery, and other diseases of children, even infants at the breast, before he essayed its employment in whooping-cough. But he lays great stress upon the perfect chemical purity of the specimens of the drug to be employed, and he prefers to use it in an aqueous solution of 1 per cent., which is the strength that I have used. The first applications, which are made by means of a large camel-hair pencil or a swab to the supra-glottic portion of the pharyngeal lining, to the opening of the glottis and the pharynx, generally increase the violence of the chinks and their number; but that soon subsides, and in the course of one, two, or three days, the patients tolerate the application, and the chinks rapidly decrease in number. It should be applied at intervals of two hours, both night and day, unless the child sleeps, in which case it should not be disturbed. In his treatise Dr. Moncorvo gives thirty cases, and of eighteen of these he gives complete details; and in a further account in the *Archivio di Patologia Infantile* of Naples for the months of May, July, and September, 1885, he gives a further series of forty cases; many of these were complicated with bronchitis and broncho-pneumonia, and many also were in children with strumous or syphilitic cachexia. In no case was the complication a cause of any difficulty in the treatment, a statement in marked contrast with the use of carbolic acid, or other of the parasiticide reagents which have been previously mentioned. The last post from Brazil brought me a little additional treatise from the pen of the Professor, containing an account of his further trials, with the result of the application of solution of hydrochlorate of cocaine previously to the employment of the solution of resorcine.

The perusal of these pamphlets roused again in me my old interest in the question, and I made arrangements for the study of the disease and the effects of this mode of treatment. I collected altogether in public and private practice 51 cases, or perhaps more correctly 50; the odd one never arrived at the stage of whooping, and cannot therefore be counted, but it was a child of six months old, the brother of one of the children included in the list, in whom the whooping was fully established. He began to cough and continued to do so for several days before I saw him. When there was every appearance of proceeding in the ordinary course to whoop, the solution was well and carefully applied by the mother to both children; the elder, who was whooping every half-hour, was so far improved that the whoops fell to three or four in the twenty-four hours; and the younger, the child in question, lost his cough altogether, and never whooped at all. Thus, then, I only count 50 cases, of which I have given a list, and from which I gather the following facts. There were in these 50 cases 19 males and 31 females, clearly showing the predominance of the disease in the female sex. The ages showed under six months 5 cases, under twelve months 5, under eighteen months 4, under two years 6, under three years 10, under four years 5, under five years 8, under six years 4, and under seven years 3. The length of time under treatment is: under two weeks, 2; under three weeks, 5; under four weeks, 11; under five weeks, 5; under six weeks, 8; under seven weeks, 10; under eight weeks, 2; under nine weeks, 3—total, 46: leaving 4 cases of which no account can be heard, but of which Mr. Mills, the assistant medical officer, reports that the probabilities are that they were cured: "I think you may say they are all cured; if they had died, I should have known about it." The total duration of disease is: under two weeks, 1; under four weeks, 2; under five weeks, 8; under six weeks, 3; under seven weeks, 4; under eight weeks, 5; under nine weeks, 2; under ten weeks, 4; under eleven weeks, 3; under twelve weeks, 3; under seventeen weeks, 1; under twenty weeks, 1; under twenty-two weeks, 1; under twenty-three weeks, 1—total, 46. Thus the average length of treatment, of the 46 cases of which we have an accurate account, is five weeks and a half, within a fraction; while the total average duration of the disease is eight weeks and a half; but it is extremely likely that both these figures would be reduced by the inclusion of the four cases which we are unable to trace. Dr. Charles West[6] gives, from an observation of twenty-five cases, ten weeks as the average duration of the disease; but it is so extremely variable in its duration that this cannot be considered as otherwise than a very favourable calculation; and I am inclined to believe that the figures I have stated above show the effect of treatment, and that the true average is much higher than it is placed by Dr. West.

I have in the foregoing statistics given the bare facts,

[1] Lyon Médical, 1876. [2] Journal de Méd. de Bruxelles, 1880.
[3] De la Coqueluche. Thèse de Paris, 1860.
[4] Ein leitende Studien über das Resorcine. Würzburg, 1880.
[5] De la Résorcine et de son Emploi en Thérapeutique. Paris, 1881.

[6] Op. cit., p. 455.

without any gloss or enthusiasm; I have placed no weight upon the individual cases, many of which have been very markedly affected by the treatment, but have trusted to averages, and where there has been any defect of observation or of knowledge have omitted them; but I think that we are justified in saying that there has been no fatality among these fifty cases, as had either of the four cases of which we have lost trace ended fatally we should have heard of it at the dispensary. Yet there were several severe cases among them, complicated with bronchitis, broncho-pneumonia, &c., such as Nos. 4, 5, 14, 16, 18, 19, 29, and 36; and of great debility, as Nos. 15, 26, and 39 (the last being a case in which paracentesis thoracis had been performed for empyema

examination nothing special was to be seen; these specimens were from cases which had been for some days under the treatment, but in those which were taken from cases where the whoop was fully established, but which had not yet been submitted to treatment, the appearances are thus described by Mr. Broadbent: "Examined with one-twelfth immersion, with B eye-piece magnifying about 800 diameters, and the preparation stained with methyl aniline violet, it shows numerous nuclei of pus-corpuscles and some shreds of fibrinous material and a few epithelial scales. In some of the latter there are numerous small micrococci, arranged singly in chains and in groups (zooglœa); similar micrococci are also seen in other parts, but in much smaller numbers;

LIST OF FIFTY CASES OF WHOOPING-COUGH TREATED BY LOCAL APPLICATIONS OF SOLUTION OF RESORCINE.

No.	Sex.	Name.	Age.	Date of onset.	Date of commencement of treatment.	No. of whoops in 24 hours.	Complications.	Result and approximate date.
1	F.	Mary E. S.	2 years	July 20th	July 27th	48	—	Cured Sept. 3rd
2	F.	Charlotte B.	1 year and 9 months	,, 13th	,, 27th	20	—	,, Aug. 10th
3	F.	Elizabeth M.	4 months	,, 24th	,, 27th	12	Congenital syphilis	,, Sept. 7th
4	F.	Sarah J. G.	7 months	Aug. 3rd	Aug. 13th	60	Severe broncho-pneumonia	,, Oct. 3rd
5	F.	Ellen Ann C.	3 years and 6 months	,, 5th	,, 13th	20	Bronchitis	,, Oct. 19th
6	F.	Lydia S.	1 year and 9 months	,, 5th	,, 11th	12	—	,, Sept. 21st
7	M.	Thomas W.	3 months	June 15th	,, 12th	20	—	,, Aug. 30th
8	M.	Charles W.	2 years	,, 3rd	,, 12th	26	—	,, Aug. 30th
9	M.	Thomas D.	3 months	Aug. 6th	,, 13th	10	Vomits freely	,, Sept. 3rd
10	M.	Ed. L.	11½ months	July 29th	,, 13th	12	—	,, Sept. 3rd
11	F.	Mary E.	2 years	Aug. 10th	,, 13th	14	—	,, Sept. 3rd
12	M.	Thomas S.	4 years and 9 months	,, 11th	,, 17th	—	—	,, Aug. 24th
13	F.	Mary M.	4 years	July 23rd	,, 17th	12	—	,, Sept. 7th
14	F.	Eliza H.	1 year and 11 months	Aug. 3rd	,, 20th	30	Bronchitis	,, Sept. 3rd
15	M.	John H. P.	1 year and 2 months	July 16th	,, 25th	10	Diarrhœa	,, Oct. 1st
16	F.	Anna P.	5 years	,, 23rd	,, 25th	12	Bloody vomiting	,, Oct. 14th
17	M.	Thomas H.	2 years and 6 months	Aug. 26th	,, 27th	30	—	,, Sept. 20th
18	M.	S. H.	6 years	,, 22nd	Aug. 28th	24	Bloody expectoration	,, Sept. 29th
19	M.	Alick J.	6 years and 10 months	,, 3rd	Sept. 3rd	40	Vomiting of blood	,, Sept. 25th
20	F.	Martha E. H.	2 years and 11 months	Sept. 7th	,, 8th	12	—	,, Oct. 4th
21	F.	A. W. R.	7 months	Aug. 8th	,, 2nd	25	Vomits freely	,, Oct. 4th
22	F.	Grace R.	3 years and 2 months	,, 8th	,, 2nd	25	—	,, Oct. 26th
23	F.	Mary McK.	4 years	March*	,, 8th	24	—	,, Sept. 29th
24	M.	Joe S.	5 years	,, *	,, 8th	30	Measles 12 months ago; coughed ever since, but not whooped till October	,, Oct. 5th
25	F.	Anne S.	5 months	June (mid.)	,, 8th	24	—	,, Oct. 19th
26	F.	Angelina P.	1 year and 1 month	,, (beg.)	,, 8th	12	Atrophy and diarrhœa	,, Oct. 15th
27	M.	Charles P.	3 years	Aug. 15th	,, 9th	10	—	,, Oct. 21st
28	F.	Mary Jane P.	1 year and 3 months	Sept. 1st	,, 17th	18	—	,, Oct. 15th
29	F.	Mary B.	3 years and 11 months	,, 14th	,, 21st	26	Bronchitis	Cannot be traced
30	M.	John McK.	1 year and 2 months	,, 14th	,, 21st	18	—	Cannot be traced
31	F.	Maria L.	4 years	Aug. 24th	,, 24th	12	Ophthalmia tarsi	Cured Oct. 30th
32	M.	Arthur L.	2 years	Sept. 20th	,, 24th	12	—	,, Nov. 26th
33	F.	Rebecca G.	9 months	,, 17th	,, 29th	6	Vomits freely	,, Oct. 8th
34	F.	Martha H.	4 years and 6 months	,, 23rd	,, 29th	30	Vomits blood	,, Oct. 30th
35	F.	Susan P.	1 year and 6 months	,, 24th	,, 29th	40	Bronchitis 6 months ago	Cannot be traced
36	F.	Margaret O.	4 years	,, 21st	,, 29th	50 or more	Vomits blood; bronchitis	Cannot be traced
37	F.	Nellie W.	2 years and 3 months	July 15th	July 20th	12	—	Cured Sept. 1st
38	F.	Annie W.	9 months	Aug. 3rd	Aug. 15th	15	—	Cured Sept. 1st
39	F.	Dottie S.	4 years	June 24th	July 9th	8	This child had empyema, and paracentesis thoracis was performed 18 months ago	,, Aug. 24th
40	F.	Elizabeth S.	6 years	July 1st	,, 9th	18	—	,, Aug. 24th
41	M.	Ernest M.	5 years and 3 months	,, 4th	,, 15th	14	These patients lived in a damp, poor cottage, in a bleak situation, on a wet clay soil, near a partially drained moss	,, Sept. 15th
42	F.	Rose M.	3 months	,, 12th	,, 15th	12		,, Sept. 1st
43	M.	William M.	2 years and 6 months	,, 12th	,, 15th	15		,, Sept. 12th
44	M.	Charles S. H.	2 years and 3 months	,, 17th	Aug. 5th	20	—	,, Sept. 1st
45	M.	Thomas W.	1 year and 6 months	Aug. 2nd	,, 17th	20	—	,, Sept. 21st
46	M.	William W.	5 years	July 14th	,, 17th	12	—	,, Sept. 21st
47	F.	Agnes P.	1 year and 9 months	Aug. 15th	Sept. 1st	10	—	,, Sept. 14th
48	F.	Ethel M.	4 years and 3 months	June 24th	July 23rd	10	Measles on June 9th, and a fortnight later whooped	,, Aug. 17th
49	F.	Mary P.	3½ years	Aug. 1st	Sept. 1st	8	—	,, Sept. 29th
50	M.	Alfred F.	2 years and 9 months	,, 25th	,, 9th	14	Measles on May 3rd, and coughed ever since	,, Sept. 29th

* Was better, and began again September 1st.

eighteen months before, and where the wound remained open and discharged pus for over six months); or cachectic, as in Nos. 3, 31, 41, and 42. It is in these cases that this treatment seems to evince a decided superiority over most other modes, as it does not cause any irritation, and need not be intermitted for the purpose of allowing other forms of treatment to be carried on, nor does it interfere in any way with such treatment. I think, therefore, that these results justify the recommendation of Professor Moncorvo; and I have also, by the aid of the well-known skill of Mr. J. Broadbent, been enabled to corroborate the statements of the Professor as to the microscopic appearances and the effects of this treatment upon them. Thus, in the earlier specimens of expectorated matters that were submitted to microscopic

the epithelial scales seem to be the chief seat of the organisms." This, it will be seen, exactly confirms the description of Professor Moncorvo.

In the light of this experience and these observations we may, then, agree with the following conclusions:—"1. That whooping-cough is to be classed among the diseases which are caused by the irritation excited by the presence of parasites. 2. That it is due to the presence of micrococci, which proliferate in large numbers upon the lining membrane of the larynx and pharynx, and which infiltrate the epithelial cells, which seem to be the preferential seat of their growth and increase. 3. That resorcine in a solution of the strength of 1 or 2 per cent., applied directly to the mucous surfaces concerned, has been found, in all cases in

which it has been employed and the results watched, to rapidly reduce the number of chinks, to reduce their intensity, and finally to lead to the cure of the disease." This last word "cure" is a bold one, but if the first and second propositions are held to be proven, then there can be little doubt that it is properly used. For if there are no other diseases *cured*, yet certainly those which are due to the irritation of a parasite are cured when that parasite is destroyed.

Lastly, the mode of application by means of a brush or swab is not the only mode in which it may be made; perhaps by some of the recently used instruments for applying medicated spray to the interior of the larynx and the adjacent parts of the throat (as that recently described by Dr. Miller of Windsor and by Dr. Hodgkinson) it may be applied yet more effectually than by the methods adopted by Professor Moncorvo and myself. And, again, it is not finally proven that resorcine is the best application that may be found. Perhaps in its near congener, orcine, we may have a still better agent for this purpose, for we find in a note by J. J. Andeer in the *Gazetta Medica Italiana-Lombardia* of July 4th, 1885, that "Orcine possesses almost all the physical properties of resorcine; but while the latter is caustic in large doses, orcine is never more than astringent and antiseptic." This seems to point the way to further experiments, but meanwhile I ask my readers to put to the proof the facts I have placed before them, and to make from them the deductions to which they lead. To guard against misunderstanding, I wish to add that, while sharing to a very large degree in the opinions so strongly asserted by Professor Moncorvo, I am not to be taken as denying that blood changes are an essential part of the pathology of this disease; nay, I am inclined to believe that some such changes are necessary to produce the peculiar pabulum for the parasitic germs, and that it is not improbable that some such change is a frequent result of attacks of measles and scarlatina, both of which evidently produce very marked effects upon the tracheal, bronchial, and pharyngeal lining.

ON A CASE OF URTICARIAL ASTHMA.

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JAMES R——, a lad aged sixteen, was admitted an out-patient of the Nottingham Dispensary on Oct. 19th, 1885, suffering from symptoms referable to a phimosed condition of the prepuce. He was at that time a fairly well nourished boy, and had been subject to no other diseases than those incident to childhood—i.e., measles, &c. On the 28th he was operated on for phimosis. When seen on the 30th, there being a swollen condition of the penis, a linseed poultice was ordered. Shortly after the application of this poultice the patient complained of great irritation, itching, and tingling of the skin, first over the part to which the linseed had been applied, and subsequently over the whole surface of the body. This was followed by an eruption of urticaria, which, starting on the abdomen, extended to the head and neck and other parts of the body. Simultaneously with this cutaneous eruption—and even with the irritation which preceded it—the patient experienced considerable difficulty in respiration, which increased in direct proportion to the amount of the urticarial rash, developing into actual dyspnœa when the eruption attained its height. This condition continued for nearly three hours, with fairly marked intermissions both as regards the rash and the difficulty of breathing. The cessation of the dyspnœa was followed by slight expectoration. The rash and the asthma coincidently subsided. Another attack occurred at 5 P.M. on the same day, lasting three hours. On the 31st similar attacks occurred at 11 A.M. and 5 P.M. He was seen when recovering from the morning illness. An inspection of the oral and nasal mucous membrane was omitted. On Nov. 1st the same condition was present. The patient had had three attacks during the course of the twenty-four hours. On the 2nd the dyspnœa and urticaria were as before. On the 3rd he was visited at 11 A.M., and found to be covered with an urticarial rash of characteristic appearance and suffering from a typical attack of asthma. The patient had to be supported in the sitting posture, and exhibited the usual signs and symptoms of an asthmatic attack. The pulse was small, quick, and feeble, beating 120 to the minute; the temperature 100°. The mucous membrane of the nasal and oral cavities was carefully inspected, and was found to be swollen and red in places. These swellings in some parts were diffuse, in others they possessed a more or less circumscribed border. They could be seen on the posterior wall of the pharynx, and also on the soft palate. Had it been possible to use the laryngoscope, I have little doubt that they would have been discovered in the larynx. The voice was subdued and husky, the patient only being able to speak in a hoarse whisper. The patient had a similar attack during the following night. He was ordered a saline with arsenic, after which there was no recurrence of the rash and dyspnœa.

The family history was good: no account of asthma, phthisis, or neurotic tendency. I believe from the foregoing details that most observers will agree with me in terming the disease now under consideration "urticarial asthma."

This case is of interest in more than one respect. In the first place, it brings clearly to the front the fact that sometimes asthma may be caused by the presence in the mucous membrane of the respiratory tract of swellings of an urticarial nature, they bearing a strong similarity to those which simultaneously appeared on the cutaneous surface. Secondly, the fact that urticaria and asthma may occur as one and the same disease, or as one and the same external expression of a certain condition of the blood or nervous system—as evidenced by the similarity of the eruption, and by the simultaneous appearance of both these phenomena—induces the consideration of the great resemblance which exists between these two diseases. Thus, with regard to causation, asthma (peptic variety) may result from taking certain articles of food, from indigestion, &c.; so may urticaria. Mental emotion, various irritations, and uterine affections may alike cause asthma and urticaria. The periodicity of attack in asthma and urticaria is sometimes marked. Both diseases are evidently of a neurotic nature. Thirdly, cases of urticarial asthma may be looked upon as occupying an intermediary position, in reference to the seat of the disease, between hay and so-called ordinary spasmodic asthma. Thus, in the case described the disease was located not more or less exclusively in the nasal cavities and pharynx, but evidently extended some considerable distance down the bronchi, as shown by the ordinary signs of spasmodic asthma. Fourthly, with regard to the cause of the attack, the operation for phimosed prepuce or the application of adulterated or impure linseed seem to me the most probable. Looking at the above considerations, one is led to inquire whether many of the cases of so-called spasmodic asthma are not due to swellings of a more or less circumscribed character of the bronchial mucous membrane, which bear a greater or lesser resemblance to the eruption of urticaria. This view (i.e., that asthma is a neuro-vascular disease) has been strongly insisted upon by Sir Andrew Clark[1], and also to some extent by Weber. Cases such as the one above described, and the consideration of the close alliance which in many respects exists between urticaria and asthma, seem to lend support to Sir Andrew Clark's theory.

THE CASE OF EDWIN BARTLETT.

MERCURIALISM; DEATH FROM LIQUID CHLOROFORM; NECROPSY.

BY ALFRED LEACH.

THE case "Regina *v.* Bartlett and Dyson,"[2] which under the name of the "Pimlico Mystery" attracted its full share of popular attention and sensational interest, presents problems of permanent interest to medical psychologists, jurists, and practitioners. I shall endeavour to set forth the medical history of the several features of the case as fully as possible and for purposes of study, and, to the best of my ability, will let my facts stand clear of the shadow of my inferences.

[1] Opening address on Asthma at the Cambridge meeting of the British Medical Association: "Theory of Bronchial Asthma." (International Journal of the Medical Sciences, Jan. 1886.)

[2] A full report of the trial appears in the Central Criminal Court Sessions Paper, vol. cliii., part 618, pp. 725–811, published by Messrs. Barnett and Buckler, of 88, Chancery-lane, to whose courtesy I am indebted for the use of an advance proof for the purposes of this article.

About 10 A.M. on Dec. 10th, 1885, at 85, Claverton-street, S.W., I first saw Mr. E. Bartlett, aged forty. I found him reclining on a sofa. He was a rather short muscular man, in appearance not much over thirty, of fair complexion, with blue eyes and light brown beard. He was somewhat pale, and looked timid, anxious, and nervous. His limbs were a little shaky. It was difficult to "catch his eye," but it could be arrested momentarily by a direct reference to his bodily ailments. He was not much inclined to speak, and turned to his wife for answers. Was evidently suffering from a little pain; when he lay back he did so with cautious movements and an air of exhaustion, but could move sharply enough when his attention was taken off himself. Pulse small and frequent; pupils very contracted (this condition of pupil was persistent till death); skin cool; breathing and temperature normal. He complained of diarrhœa, with tenesmus, sickness, some pain in the abdomen, "bad mouth," and great sleeplessness. (*a*) Diarrhœa: The motions which his wife had preserved for my inspection were dark and loose, like chopped spinach mixed with a little tar, and were accompanied by some clots of red blood. He had no piles. The urine was very scanty, but normal. (*b*) The vomit was watery, containing bits of partly digested food and some bile. (*c*) The pain in the abdomen was not severe or localised, but the left iliac region was dull on percussion, and there was tenderness in the regions of the stomach and sigmoid flexure; the rest was tympanitic. (*d*) The breath was offensive, with the peculiar mercurial odour. The tongue was coated, especially posteriorly. He complained of a bad taste, but could not describe it. The gums were red, swollen, and spongy, with a deep bluish-red margin about an eighth of an inch in depth. In the upper jaw this edging was slight, though distinctly present; in the region of the lower bicuspids it was more developed; but in the edges of the gums of the lower canines and incisors it was very obvious. Some salivation and tenderness about the parotids existed. The teeth showed signs of neglect, but the patient did not complain of much recent increase of pain in them. The lower canines and incisors were fairly good, but had few opposing teeth in the upper jaw. There were over a dozen loose molar stumps in a horribly carious condition. (*e*) Complained of insomnia; as a rule little sleep sufficed. Asked for my diagnosis, I replied, "Mercurial poisoning." He could not account for the mercury, and said, in private, he had never had syphilis. A careful search failed to reveal any trace of the disease, and its absence was confirmed by the post-mortem and by a special search seven days after death. I suspected syphilophobia and his having resorted to quack specialists, but his assurances negatived both. Finally, he remembered taking a few days previously, and for no accountable reason, a pill of unknown quality, but no other medicine for weeks. He had been ill two or three days when I saw him, and the symptoms had steadily increased. The diarrhœa, melæna, and sickness were cured by bismuth and cinchona in a couple of days; the mouth somewhat improved under chlorate of potash lotion; and a little sleep was ultimately obtained by opiates.

But whence the mercurialism? Had the patient been practising suicidal experiments? Was he the victim of a poisoner; or were these symptoms accidental to an ordinary mercurial dose taken by a patient in bad health and highly sensitive to the drug? Tentative *felo de se* is somewhat negatived by his subsequent anxiety (apparently real) to have various things tested for mercury. He was a member of a firm of grocers, and did the wholesale buying part of the business—the tea tasting and mixing, the butter and cheese tasting, &c., as many as 300 samples in a day. It seems like straining hard for a theory if one suggest that he, a professional taster and a man who by all accounts carried tasting to the height of a fine art, was having administered to him a mercurial salt without discovering it; and advocates of this theory would have to fall back, I presume, on the tasteless but heavy subchloride for support. 1. I concluded the dose of mercury was not large because the case yielded so readily to such simple symptomatic treatment, and profuse salivation and tremors were absent. 2. But the melæna and blood suggest a large dose. The man's digestive organs were in a precarious state owing to his vocation, and he probably had an idiosyncrasy for mercury. Few drugs seemed to produce their normal results on this patient. 3. It was not chronic poisoning, because the symptoms were recent and urgent, and, again, profuse salivation was absent. 4. But the blue line is, when present, a sign of chronicity. Still, a man with a cleaner mouth—i.e., less hydrogen sulphide to seize upon the mercury circulating through the gingival margins—would probably have escaped this blue line under similar circumstances. Finally, what preparation of mercury did he take? He picked the pill to which *he* attributed these symptoms from a drawer of old samples in a grocer's shop. If this caused his symptoms, did it contain impure calomel (subchloride *plus* perchloride)? Was it corrosive sublimate pure and simple? Was it an ancient blue pill (grocer's quality) containing sulphate of mercury formed by the action of the H_2SO_4 occurring as an adulterant of the confection of roses? Was it mercury pill and nothing more? We shall never know. The symptoms were strangely suggestive of corrosive sublimate.

From Dec. 13th to the 31st, when the patient died, the case is chiefly one of psychological interest, and before approaching it in that light I will give a brief "previous history," and clear the ground of one or two physical complications. The patient is reported to have enjoyed robust health until the summer of 1885. Some years previously he suffered somewhat through overwork at amateur house-building. His teeth were always his chief trouble. About ten years ago he had the misfortune to be supplied with a gold plate without having the subjacent stumps extracted, and the plate soon became unbearable. A second set of teeth was made, and this too was discarded. Thenceforth he abjured the services of his dentist and toothbrush. Strange to say, his digestion appears to have remained perfect, though sorely taxed by irregular diet, tea-tasting, &c., until a few months before he died. He is said to have occasionally suffered, during the last year of his life, from a paroxysmal pain in the left side, a glass of wine being sufficient to provoke it There was no history of previous illness, and, medically speaking, his family history was good. Though always a shrewd man of business, he seemed to have been in private life somewhat peculiar. One fact elicited at the trial may be interesting to note: his handwriting could never be depended upon; it varied from day to day. He was not an illiterate man; he had a reverential regard for advanced learning; but his studies of late years seldom took him beyond veterinary works and books about dogs; and he had some taste for political economy. He was retiring, diffident, and in no sense unmannerly. He married when nearly thirty. His marital relations, it will be remembered, are stated to have been of a most unusual character. He was of generous instincts in pecuniary matters, sending unsolicited subscriptions to charities, and is said to have kept an earthen jar full of small silver coin for handful distribution among the poor. About December 13th he complained of increasing pain in the gums and tenderness in his teeth, and these were getting loose. By the 15th the blue line was giving way to a dirty grey one, with a red area of demarcation between it and the rest of the gum. The inner surface of the lip in contact with the stumps of the upper central incisors presented a superficial greyish and white sore as large as a sixpence. On the 16th Mr. T. A. Roberts, L.D.S. R.C.S. Eng., who coincided with the diagnosis of mercurialism, removed these two stumps; the mucous membrane of the lip healed, and the gum soon grew over the vacant sockets. The following day (17th) Mr. Roberts extracted ("picked out" would be the better word) about eleven very rotten loose stumps and teeth from the upper and lower molar regions. On the 18th all bid fair for recovery excepting the front of the lower gums. Here the whole margin of the gum had sloughed, and I removed a dead strip about an inch long and over an eighth of an inch broad, leaving exposed the edges of the alveoli and a ragged granulating gum. A long, greyish, and dark stain along that part of the mucous membrane of the lower lip hitherto in contact with this slough was observed. On the 19th Dr. Dudley described the gums as presenting a ragged edge. On the 20th the mucous membrane of the lower lip presented a longitudinal dirty slough, the four lower incisors were loose and painful, and the gum anteriorly and posteriorly exquisitely tender and receding from the bone. On the 21st the dental surgeon extracted the four lower incisors, and the inner surface of the lip improved, but the gums continued to recede from their alveoli. About the 28th the condition was as follows:—Breath offensive. Upper and lower gums healed, with the exception of the lower incisor region, where there lay a broad flat fungoid substance that seemed to spring from the empty sockets; it was supposed to consist of decomposed food, mucus, and coagulum; it extended from one to the other canine teeth, and its antero-posterior measure-

ment was about three-quarters of an inch; it could be raised from the front and back gums which bordered it but its partial removal from the alveoli caused pain. The local treatment included the application at various times of chlorate of potash, Condy's fluid, and emulsified iodoform. On the 31st the alveoli beneath the fungoid growth were blackened and very painful, and, to make things worse, the edge of the gum round the lower left canine began to recede and slough, and the patient complained of great pain in that tooth. Between this canine and the next bicuspid a space existed in which a second fungoid mass was lodged, and it was decided to extract the tooth in the hope of alleviating the pain and clearing away the accumulation. On this occasion nitrous oxide gas was given, the patient taking a very large quantity, and recovering from its effects exceptionally rapidly. He expressed himself relieved, and was in very good spirits and quite talkative, and returned home to take his supper. (That night he died.)

Another ailment presenting itself for treatment was "subacute gastritis." By this expression I mean simply a more or less acute exacerbation of a more or less persistent dyspepsia. The history given me on Dec. 10th was one of mild dyspeptic troubles during the preceding months. These troubles had increased in severity during the last week; they were temporarily overshadowed by the mercurial symptoms, and soon improved under bismuth, &c. An explanation of their occurrence is written large in the account given of the patient's habits by witnesses. For instance, while living at Dover, he would, after three or four hours' sleep, rise at 3 A.M., travel to London, work hard all day at tea, cheese, and butter tasting, or engage in the worry of his wholesale and retail business, to which he was enthusiastically devoted, make a "snack" here and a hurried "snack" there stand in lieu of meals, and then return to Dover late at night. Add to this his inability to masticate. He was strictly temperate in the matter of alcoholic drinks. His digestive organs were practically sound by the middle of December. The next event was the appearance, without any previous symptom indicative of its existence, of a lumbricoid worm on the 23rd. Suspecting the presence of more, and misled by his assurance that he felt one wriggling in his stomach, his gullet, his throat, I administered santonine on the afternoon of the 26th, and followed this up by purgatives, which utterly failed in producing an evacuation. The list of those taken between 3 P.M. and 3 A.M. is as follows: Two drachms of sulphate of soda; two drachms of liquid extract of cascara sagrada; five drachms of sulphate of magnesia; two drachms of tincture of jalap; one minim and a half of croton oil. He said he was sure I was giving him stimulants to strengthen him; he especially affected the croton oil—it was "so comforting and made him feel so strong." The majority were swallowed in my presence, for I half suspected him of duplicity when the first ones did not furnish results, and I dreaded leaving santonine in him. He took hot tea and coffee, and finally I applied galvanism to the spine and abdomen. About 3.30 A.M. he said he was "feeling a bit tired and wanted some solid food"; so, with a humiliating sense of defeat, I left, telling him that the resources of civilisation were at an end. Six hours later his usual matitudinal evacuation occurred, but on this occasion it was unusually small in amount. The amazing part of this episode is that during the preceding fortnight his bowels had been fairly regular; from the 26th mild constipation set in, and was treated with belladonna and phosphate of strychnine. But no second worm was ever discovered.

(To be concluded.)

TESTIMONIAL TO PROFESSOR BERTRAM WINDLE, M.A. The students of Queen's College, Birmingham, met on the 18th inst., under the presidency of the Warden, the Rev. W. H. Poulton, to present a testimonial to Dr. Bertram Coghill Windle, M.A., their Professor of Anatomy, on the occasion of his marriage. Mr. H. S. Chavasse read an illuminated address expressing the students' deep gratitude and best wishes for their distinguished teacher; and Mr. J. F. Jordan formally presented the testimonial, which consisted of a handsome case of plate. Professor Windle, on rising to return thanks, was received with enthusiastic applause. The proceedings concluded with a vote of thanks to the Warden, moved by Professor Bassett, and seconded by Mr. Ernest J. Gamgee.

A Mirror
OF
HOSPITAL PRACTICE,
BRITISH AND FOREIGN.

Nulla autem est alia pro certo noscendi via, nisi quamplurimas et morborum et dissectionum historias, tum aliorum tum proprias collectas habere, et inter se comparare.—MORGAGNI *De Sed. et Caus. Morb.*, lib. iv. Proœmium.

ST. BARTHOLOMEW'S HOSPITAL.

BULLET-WOUND OF FOREHEAD; OPTIC NEURITIS; PARTIAL RECOVERY.

(Under the care of Mr. THOMAS SMITH.)

THE notes of the following case, which we are enabled to publish through the kindness of the surgical registrars of the hospitals in which he was treated, will be read with considerable interest. The bullet, which was an ordinary slug, in common use in revolvers, was fired off close to the forehead, and, taking the course described in the report of the necropsy, lodged in the posterior clinoid process, dividing the left optic nerve in its track, and compressed but did not wound the carotid artery. The symptoms appear to have been chiefly due to inflammatory changes and suppuration in the track of the bullet, and loose sequestra required removal, but there was obviously no chance of removing the foreign body. The patient lived altogether 291 days after the receipt of the injury. We recollect to have seen a somewhat similar case at St. Thomas's Hospital about eight years ago, in which the bullet passed in a similar direction and for the same distance, entering through the right upper eyelid, the infliction of the injury being followed by blindness in the left eye and ultimately atrophy of the disc. This patient, however, recovered, and is still alive. For the following notes we are indebted to Mr. A. A. Bowlby, surgical registrar.

G. M——, aged nineteen, was admitted into Henry ward, under the care of Mr. Smith, on July 10th, 1885, suffering from a bullet-wound in the forehead. The wound was said to be suicidal. The patient was in a semi-conscious state; he could tell his name, but was quite unable to give any account of himself, and did not appear to understand the questions put to him. He was very restless and noisy, constantly shouting and uttering inarticulate sounds. In the middle of the forehead was a bullet-wound communicating with a fracture of the frontal bone, and bleeding profusely. A probe could be readily passed for a distance of three inches and a half in a direction downwards, backwards, and a little to the left. There was a good deal of swelling about the left eyelid and conjunctiva, with bleeding from the nose and vomiting of blood. The pulse was 64, and a little irregular; temperature 98·4°. For the next twenty-four hours the patient continued very restless and noisy. His temperature reached 100° in the evening following the accident; he did not sleep at all. The next night he became quieter, and slept for four hours after a dose of bromide of potassium and chloral.

July 13th.—The patient at times talked quite sensibly and coherently, at other times he wandered. He said that he was blind in the left eye. Pulse 64; temperature 100°; passes urine naturally.

14th.—As the discharge did not seem to escape very readily from the wound, a drainage-tube was inserted; he is now quite sensible, and only complains of pain in the left side of the head. Pulse 60; temperature 99·8°.

16th.—As the pain continued, four leeches were put on to the left temple, to the great relief of the patient. Pulse 76; temperature 101·8°.

17th.—Patient is extremely irritable, and refuses to be examined in any way; complains of pain and is very noisy; after eight leeches had been applied to the mastoid processes he became quieter and easier.

From this time the patient gradually improved. He was never again unconscious, though at times very irritable and noisy. His temperature sank to normal on Aug. 4th, never having been higher than on July 16th. Sometimes he slept well, at other times morphia injections were necessary. An examination of the left eye showed that the disc was in a

very marked condition of white atrophy, but all the media were clear. There was absolute blindness. The discharge from the wound diminished, but did not entirely cease. No necrosed bone could be found after careful examination under chloroform towards the end of July. As his friends were anxious to take him out, they were allowed to do so on Aug. 17th.

GUY'S HOSPITAL.

BULLET-WOUND OF FOREHEAD; DIVISION OF LEFT OPTIC NERVE; OCCASIONAL EPILEPTIFORM SEIZURES; COMA; DEATH; NECROPSY.

(Under the care of Mr. BRYANT.)

For the following notes we are indebted to Mr. Targett, surgical registrar.

G. M——, aged nineteen, living at Camberwell, was admitted into No. 18, Job ward, on Aug. 17th, 1885, and died on April 17th, 1886. Five weeks ago the patient attempted to commit suicide by placing a pistol against his forehead in the middle line, about an inch above the eyebrows. On firing the pistol he felt a whirring sensation, but did not lose consciousness. He distinctly remembered being conveyed to the cab and taken to St. Bartholomew's Hospital, where he was under the care of Mr. Smith. (See *supra*.)

On admission, the patient was rather thin, and had a very heavy look about the eyes; his left pupil did not answer to the stimulation of light, and there was a slight blackening beneath the eyelashes; he was able to follow the finger when moved in different directions, both eyes working together; the left eye was not bloodshot; there was no paralysis or loss of sensation in either the limb or head, and none of the nerves to the muscles of the left eye were severed; there was tenderness between the eyes and around the wound; the bullet-wound was centrally placed between the eyes and a little above them; it was circular, and the edges presented granulations; there was some discharge from the sinus.

Aug. 21st.—Temperature 100·2°; pulse 90. The specific gravity of the urine was 1023; it contained mucus; no albumen, sugar, or blood. The patient was placed under chloroform. Mr. Bryant opened the wound between the eyes and a little above them, and took out two small fragments of bone by means of bone forceps. Retractors were placed on each side of the wound, a probe was passed, and some fragments of bone felt. The wound was dressed with iodoform gauze.

Sept. 1st.—The patient seems well, and does not complain of any pain; temperature 100·4°; he sleeps well; the left eye is still insensible to light.

2nd.—Patient has had a bad headache all night, and has had no sleep. The wound was dressed to-day, and there was a good deal of foul discharge. Temperature high and rising.

3rd.—The patient has had a bad night, and complained of severe pain in his head. Temperature 103·4°. He has been slightly delirious all day, and has taken no food; he still complains of headache, and is very restless. Pulse 150, soft and compressible; he has been sick several times, bringing up a greenish fluid. Chloroform was administered, and Mr. Clement Lucas prolonged the old incision, made another incision at right angles to the first, and reflected the four flaps; the supra-orbital artery of each side was twisted. Some granulating brain matter was then observed to be pushed up through the bullet-hole, and to be pulsating. It seemed to lie between the inner and the outer tables of the skull and in the frontal sinus. Mr. Lucas then cut with the trephine a small circular piece of bone about three-quarters of an inch in diameter, a little to the left of the median line. The granulations were then cut off, and a probe was passed; it went in easily, and evidently in the track of the bullet, for about three inches backwards and a little outwards, but the bullet was not felt, nor could any amount of pus be obtained by means of an aspirator. The probe seemed to pass under the left anterior frontal convolution.

4th.—Wound dressed. The temperature, which was 104° at midnight, this morning is 102·2°. He is restless, complains of pain in his temples, and wanders a good deal.

5th.—Temperature not so high, and he is quieter; he seems to have completely lost the sense of smell.

6th.—Wound dressed. Protruding through the trephine hole is seen a hernia cerebri, which pulsates very distinctly. The patient's condition is about the same, and his temperature varies between 101° and 103°.

7th.—The patient is lying in a semi-conscious state. He breathes rather heavily, but the pulse is moderately strong. An ice coil has been applied to his head.

During September there were frequent attacks of hæmorrhage from the trephine opening—on the 9th, 10th, 13th, 15th, 18th, and 20th. For a few days about the 9th of the month there was considerable discharge of cerebro-spinal fluid saturating the pillow, and the patient had pain at the back of the head and neck. During the earlier part of this month the temperature was usually high, and higher at night than in the morning; but towards the last week it became and continued normal, and there was corresponding improvement in the general condition.

Oct. 11th.—The patient was very drowsy, and would not take his food until late in the afternoon yesterday; he seems very sleepy again to-day, and will not speak when spoken to.

12th.—Patient has been shaking very much since last night, especially in his arms and legs. Two small pieces of necrosed bone came away from the wound yesterday, when the wound was being dressed. Wound granulating well.

14th.—The shaking which the patient had on the 12th has quite stopped; he is quiet, and takes his food well.

20th.—Patient about the same; he has a cradle over his legs, as the pressure of the clothes causes small sores to appear.

26th.—An abscess which had formed just beneath the chin on the right side was opened, and a good deal of thick greenish pus came away.

30th.—At 6.45 P.M. the patient was suddenly seized with convulsions, having been quite sensible up to the time of their occurrence; they began with contraction of the muscles of the face and clenching of the hands, and then extended to the whole of the body. The fits continued with short intervals from time to time, the length of each fit varying from one to five minutes, but the intervals rarely exceeded one minute. The convulsions consisted of muscular contractions, beginning (as a rule) in the left arm and leg, and then passing over to the right arm and leg; the pupils were widely dilated, and nystagmus was noticed in every direction; the teeth were firmly clenched, and a slightly blood-stained foam issued from beneath them. Pulse weak, varying from 130 to 140. Respiration rapid, shallow, and irregular, almost ceasing at times where the spasm was most intense. At 7.30 an injection of one-sixtieth of a grain of eserine was given, which seemed to shorten the length of the fits for a time; the dose was repeated a quarter of an hour later, but with small effect. At about 8 o'clock a quarter of a grain of morphia was given, which seemed to have very little effect. Chloroform was given for a quarter of an hour; the patient had only one slight fit during the administration, and when it was discontinued the patient fell into a sleep.

Nov. 2nd.—Patient had another fit last night, but it did not last more than a few minutes; he seems much better again this morning.

The man had convulsive seizures on Nov. 2nd, 3rd, and 6th, and the treatment was changed to twenty grains of bromide of potassium three times a day on the 7th. On the 11th he was very weak, almost collapsed, but rallied again, being able to read the newspaper on the 19th. On the 25th there was wandering and left external strabismus, with earache on the left side, which lasted three or four days. During December he improved, being able to sit up in front of the fire. The pain and deafness on the right side were complained of at the beginning of the month, and it was noted that there was much general muscular atrophy. The patient had another fit on January 6th, 1886, but during the remainder of the month he continued in fair health. The left eye was examined by Mr. Targett on the 15th; the pupil was dilated and fixed, the disc was atrophied, and there was evidence of old neuritis. During February the patient was up and about the ward every day.

March 9th.—About 7 P.M. yesterday the patient was noticed to turn very pale. At the same time he had spasmodic contraction of all the muscles of his face. His arms were also affected. This contraction of the muscles was more violent on the right side than on the left. He then became flushed, frothed at the mouth, and afterwards presented a livid appearance. In all he had some eight or nine fits. This morning on examination his tongue is found to be bitten, especially at the edge. The pupil of the

left eye is more dilated than that of the right; neither of them reacts to light. During the fits one globule of nitrite of amyl was administered. Afterwards forty grains of bromide of potassium were administered per rectum. The patient recovered again from this condition, and was about the ward until April 9th.

April 12th.—The patient took to his bed again on the 10th. He has been sick at times.

13th.—During the afternoon the patient got worse; he lies in a barely conscious condition, speaks indistinctly when spoken to, and hardly takes any notice when addressed. Does not complain of pain. Pulse 58, very weak; respiration 20, shallow. The extremities feel cold to the touch; there is no rigidity of the joints or limbs. The right pupil is rather dilated; neither of the pupils reacts to light. No anæsthesia or hyperæsthesia.

14th.—1 A.M.: The left pupil reacts to strong light; the right pupil is dilated and does not react. Optic neuritis commencing in the right eye; the disc is red and ill defined; vessels obscured by exudation; the left disc is atrophied. Knee reflexes exaggerated on both sides; ankle-clonus present; triceps reflex exaggerated; some rigidity of the left arm; trembling movements of the fingers and hands at times. Pulse 55, respiration 19. The patient is unconscious.

15th.—The patient is still unconscious; takes but little nourishment; passes everything beneath him; occasionally there is a spasmodic action with one of the hands: the hand is generally lifted up to scratch the nose; otherwise there is no movement whatever.

17th.—Patient died about midnight; his respiration stopped some ten minutes before his pulse ceased beating; artificial respiration was resorted to for some time, but with no real effect; he was still perfectly unconscious when he died. Temperature 100·4° before death.

Post-mortem report by Dr. GOODHART. — Body well nourished. In the median line of the forehead, slightly inclining to the left, was a small circular aperture with a depressed cicatrix around it; a probe passed from this into the right frontal sinus would not, from some cause, go directly backwards or into the left sinus. When the calvaria was removed, however, the right frontal sinus was not exposed, but the left was completely ploughed up and opened. The bullet track was indicated by a gaping trough full of thick muco-pus, which ran along the floor, or rather in the floor, of the anterior fossa of the skull backwards to the posterior clinoid process on this side. The frontal sinus here was opened up completely, and formed the anterior part of the trough into the ethmoidal sinus; the roof of the ethmoid having all gone, the posterior part was formed of the sphenoidal sinuses, which were in like manner opened up and full of gelatinous soapy pus. The bullet was embedded in the left posterior clinoid process and adjacent bone, and in this situation had pinned in and surrounded the internal carotid artery; but there was no clot in the vessel. It had completely severed the left optic nerve just in front of the chiasma. On turning to the brain, both frontal lobes were adherent to the dura arachnoid about the region of the wound, and there was evidence of an old meningitis of the base in various white milky thickenings. The surface of the brain was dry-looking and the convolutions flattened all over the vertex. A large abscess existed in the right frontal lobe, occupying the greater part of it; it would hold perhaps two ounces. The pus was thick, green, and free from smell. In addition to this large abscess, there was a small cyst holding about a drachm just behind and below it. This was of quite a different appearance to the other; its contents were broken-down altered grumous blood, and its wall was yellow and atheromatous-like in appearance. I thought at once that it might be aneurysmal, but it was not tough enough for an arterial sac. It was not distinct from the brain, and I could find no dilatation of vessels leading to it or any vessel at all. It was therefore a bruised patch of brain, and inasmuch as it was close to the position of the wound made by the bullet I have no doubt it was produced by the original injury. The wall of the front cyst (the abscess) was fairly tough, and a millimetre or so in thickness. Its lining membrane was very vascular in appearance. This abscess had all but opened into the ventricle, but not quite. The wall of the right ventricle was distinctly thin and the brain soft beneath the outer edge of the nuclear caudatus (head). The ependyma of both lateral ventricles was markedly sandy. The other viscera were not examined.

GREAT NORTHERN CENTRAL HOSPITAL.

FRACTURE OF THE NASAL AND SUPERIOR MAXILLARY BONES, FOLLOWED BY NECROSIS AND ABSCESS WITH PROPTOSIS; REMOVAL OF THE SEQUESTRUM; REMARKS.

(Under the care of Mr. W. SPENCER WATSON.)

IN the following case the occurrence of a considerable proptosis, with distortion of the nose, gave rise to some obscurity in the diagnosis. The patient was first seen at a late period of the case (fifteen months after the injury), and the protrusion of the eyeball, accompanied by a nodular swelling of the lower margin of the orbit, pointed at first to some chronic form of disease involving the orbit, and possibly extending upwards from the antrum. The subsequent history of the case, however, makes it clear that the irritation set up by the presence of the sequestrum in the nostril sufficed to explain all the symptoms.

Ada H——, aged seventeen, a healthy, well-grown girl, came under observation in February, 1886, with an unsightly protrusion of the right eyeball and a swelling of the right side of the nose. Fifteen months before, one of her fellow work-girls struck the patient by a sudden movement of the head against the bridge of the nose. This was followed by much pain and swelling of the parts, and ever since there had been a constant discharge of sero-pus from the right nostril, with the accumulation of mucous crusts, which were removed with great difficulty. The protrusion of the eyeball had come on quite recently.

On admission (March 12th, 1886) there was much swelling of the whole of the right side of the nose from the region of the lacrymal sac downwards, and extending somewhat over the bridge of the nose to the left side. There was mucous regurgitation on pressure over the sac. The nostril was partially obstructed by crusts of mucus, with occasional discharge of blood-stained matter; very little fetor. At the lower border of the orbit near the inner canthus a firm nodulated button-shaped swelling was felt by the finger, with slight mobility, and free from adhesion to the skin covering it, but attached deeply to the floor of the orbit. Some redness and swelling of the lower eyelid and regurgitation of mucus from the sac took place when pressure was made over it. On probing the nostril (a view of the interior of which was obstructed inside the vestibule by considerable swelling) no bare bone could be felt. The vision of the protruded eye was not affected, nor was there any diplopia. There was no visible swelling in the roof of the mouth nor in the pharynx. Under the angles of the jaw on both sides were several enlarged lymphatic glands.

March 15th.—Bare bone was felt by the probe on the outer wall of the nostril. The right canaliculus was slit up and probed, but no bare bone was felt in that direction. A large ragged ulcer, with everted edges, was seen just within the vestibule of the right nostril, occupying its outer side and extending upwards. Bare bone was felt in this situation.

31st.—The girl was put under the influence of ether, and after full exploration a piece of necrosed bone was found lying in an abscess cavity communicating with the nostril. The finger could be passed into this cavity, and the sides were felt to be formed by fragments adherent to the soft parts. The sequestrum removed was of the size of a split pea, and had ragged edges and surfaces. Deeper in the nostril, towards the middle meatus, another bare surface of bone was felt. It was not loose, but a portion was scraped away. The cavity from which the sequestrum was removed was freely scraped and cleaned by a small gouge. The girl recovered well from the operation, and the nostril has been syringed with a solution of permanganate of potash, and boric acid ointment applied frequently.

April 19th.—The swelling of the nose has completely disappeared, the loose fragments forming the wall of the abscess cavity having fallen into their respective places. There is still an indication felt by the finger through the skin of the side of the nose of the position originally occupied by the sequestrum, but there is no visible distortion, and the nose is perfectly symmetrical. The protrusion of the eyeball is becoming less every day, and the nodular swelling on the floor of the orbit is receding. The lymphatic glands under the lower jaw have almost disappeared.

Remarks.—The irritation set up by the presence of the necrosed piece of bone in a confined abscess cavity gave rise to so much disfigurement and swelling, that the case, when

first seen, presented some of the features of a specific ulcer within the nostril. The enlarged lymphatic glands under the angles of the jaw also gave support to this view of the case. As, however, all the symptoms have subsided, it seems probable that the local irritation was due to septic poisoning from the abscess cavity, and the proptosis was probably due to a diffuse cellulitis of the orbit starting from the same focus of infection. Had the sequestrum remained, there would no doubt have been an extension of inflammation with abscess in the orbit, and possibly general septicæmia might have been set up.

Medical Societies.

PATHOLOGICAL SOCIETY OF LONDON.

Adenoma of Ovary.—Adenoma of Palate.—Neuroma of Parotid.—Actinomycosis in Man.—Erythrasma.—Vessels in Meningitis.—Gangrene of Lung.—Miliary Tubercle in Pulmonary Artery.—Mediastinal Tumour.—Peripheral Neuritis, Myelitis, Pachymeningitis.—Duct Papilloma of Breast.—Secondary Epithelioma of Jaw.—Osteochondrosarcoma of Breast.—Osteochondroma of Thigh.

THE last meeting of the session of this Society was held on Tuesday last, Dr. Bristowe, President, in the chair.

Dr. COUPLAND (hon. secretary) read the report of the Morbid Growths Committee on Mr. Peek Richards' specimen of intracranial tumour. The tumour was a cyst with very vascular sarcomatous wall, into which hæmorrhages had occurred; it was developed from the infundibulum and third ventricle. The report was signed by Drs. Fred. Taylor and F. C. Turner.

Mr. F. S. EVE showed two Ovaries removed by Mr. Lawson Tait. In one ovary there was a circumscribed fibrous mass in one part and cysts in the other half, but they had no connexion with each other. The fibrous mass showed columns of germinating epithelium separated by a fibrous stroma. The specimens suggested one mode in which cystic disease might be produced by development from adenomatous tissue. The account of the development of the ovary given by Balfour, confirmed by Klein, showed that the germinating epithelium became thickened, and then the stroma grew into and divided it up into the trabeculæ. But in the development of the ovary an evolution of the Graafian follicles occurred, but this did not take place in the adenomata. Reference was made to a specimen of Mr. Alban Doran's, of a tumour weighing 14 lb., from a girl aged sixteen, in which similar appearances obtained, with a hyaline degeneration. Klein had described small masses of embryonic tissue in the fully developed ovary, which might form the starting-point of tumours. It was possible that cystic disease of the ovary might develop from such nests of cells. Mr. Eve thought that these observations brought ovarian tumours into the same line of formation as tumours in the breast, testicle, and skin—a generalisation of considerable importance.—Mr. ALBAN DORAN said that if Mr. Eve had confined his remarks to adenoma he should have entirely agreed with him. He was not prepared, however, to connect adenoma with cystic disease, and had examined 200 specimens without finding any evidence of such connexion. In Hart's paper on General Anatomy the extreme difference in the developing structure of the ovaries of such animals as cats, dogs, and human beings was pointed out. The embryonic tissue described by Klein had been shown to be relics of Wolffian bodies wandering in from the hilum of the ovary.

Mr. HUTCHINSON showed specimens of Adenoma of the Palate. The first was a slowly growing and slowly ulcerating tumour situated at the junction of the hard and soft palate; it occurred in a lady aged thirty, and had grown for one year, was ill defined at its edges, and ulcerated in its centre down to the bone, which could be struck; it was curious that no inflammation had occurred around it. Sir James Paget agreed that it was a most unusual form of growth. It was freely removed ten years ago, and had not recurred, neither had the glands been affected. The second case was also a quiet ulcerated tumour with bossy edges, and situate in the same place; it appeared in a gentleman aged forty-five, and also without any glandular implication. This was also freely excised six months ago. The structure of it was that of an adenoma, like the salivary glands in places and the tonsil at other parts. The ulcer had the appearance of a large open follicle of the tonsil, at the bottom of which a cheesy mass of very fetid substance existed; this ulcer did not expose the bone as in the first case, and there had been no recurrence. The literature did not throw much light on such cases, few authors mentioning the ulcerative quality of the tumours. The specimens also differed in not being encapsuled, most of the palatal adenomata being encapsulated.—Mr. BARKER referred to an adenoma of the palate that Mr. C. Heath had removed; it also presented the fetid caseous material in its base.

Mr. HUTCHINSON, jun., showed a Neuroma of the Parotid Gland, one inch in its longest diameter, taken from the left parotid by Mr. Waren Tay. It shelled out with the greatest ease, and the operation was followed by facial paralysis. The tumour was composed of minute round or oval bodies, from $\frac{1}{1000}$th to $\frac{1}{2500}$th of an inch in diameter, which broke up into concentric capsules, like the layers of an onion. Each had a concentric arrangement of cells and fibres, like end bulbs; there was no doubt of the existence of nerve fibres. The tumours probably developed on the branches of the facial nerve trunk. Reference was made to some observations of Rindfleisch and of Czerny on plexiform neuroma; but the specimen shown seemed to be unique.—Mr. BUTLIN said at first the specimen reminded him of a neuroma figured in Virchow's *Die Krankhaften Geschwulste;* but this was not the case. He had not been able to find either picture or description of a similar specimen, which must therefore be exceedingly rare.—Dr. HALE WHITE did not regard the concentric bodies as of so highly developed a nature as end bulbs; and end bulbs, on a motor nerve like the facial, would be very unlikely to occur.—Mr. HUTCHINSON, in reply, said that there were sensory nerves in intimate relation with the parotid gland.—The specimen was referred to the Morbid Growths Committee.

Dr. T. ACLAND read a paper on the Etiology and Pathology of Actinomycosis. Reference was made to a paper by Mr. Shattock in the Transactions of 1885. As to the clinical signs, they presented no specific characters. The actinomyces were found in the centre of each area of inflammation; in the cow they had the appearance of tufted rosettes with pyriform or clubbed-shaped rods. The first cases of human actinomycosis in this country had been recorded by Dr. Sharkey and himself; Mr. Shattock subsequently described some cases. In the human being the appearance was that of innumerable fine threads, single, branched, clubbed, or straight. He maintained and gave his reasons for believing that the structures were not due to the method of preparation, nor were they post-mortem growths, and certainly not crystallised fat due to retrograde changes in caseous products. Unsuccessful attempts had been made to cultivate the organism. Israel had attempted to inoculate a calf with the human mycotic material, but without success, though he had watched the animal for several months. One observer had cultivivated the actinomyces in gelatine and blood-serum, but he had not succeeded in reproducing the disease in animals. The structures did not become altered by acetic or nitric acids, nor by ether or alcohol, and were not blackened by osmic acid; they stained like an organism. Injection into a vein of the ear of a rabbit of cultivations of aspergillus fumigatus was followed by the death of the animal in a few days. Then spores could be found sprouting in a large vessel of the lung; this proved that mycelial growths could be causes of disease in animals. To show that the actinomyces was not an accidental contamination of a microscopic specimen, he exhibited a specimen of Dr. Percy Kidd's, which showed how unlike the two things were. Again, Mr. Solly had shown a preparation of crystallised fat from caseous material which did not stain; this to meet the other objection that the actinomyces was a crystalline product.—Dr. BRISTOWE believed that similar appearances were to be seen in the Madura foot, though the masses of growth were larger and coarser in structure.—Mr. CROOKSHANK showed many specimens of micro-organisms; actinomyces showed a likeness to the threads of mucor. In some kidneys a kind of mycosis produced by spores of fungi—aspergillus fumigatus—had some resemblances also. He agreed that it was difficult to demonstrate the club-shaped rods in some of the specimens. Jöhne had described a mycotic disease having clinical features like those of actinomycosis. In some of the preparations made by Mr.

Crookshank it was easy to demonstrate the radiate structure in the fresh state, but not in stained specimens.—Dr. PERCY KIDD considered that one of the merits of Dr. Acland's work was that he had succeeded in proving that we had to deal with two sets of cases, that of actinomycosis bovis and the human variety. In the latter an appearance of a number of threads as of bacillus was bounded by small colonies of bacilli at their periphery.—Dr. ACLAND, in reply, thought the question of the organism in Madura foot would repay reopening, especially after the investigations of Lewis and Cunningham; he did not think the organism was the same in Madura foot as in actinomyces, but even in the latter he was not prepared to say what the growth was, whether aspergillus, mucor, or bacillus—nor, indeed, whether it was communicable from animals to man.

Dr. F. PAYNE showed a specimen of Erythrasma taken from a man aged forty, who for ten years had had a brown patch on the scrotum and corresponding part of the thigh; it was scaly and of a coffee-ground colour, not unlike pityriasis versicolor. After staining with methyl violet an organism of minute dimensions showing filaments one-third the size of the trichophyton was visible. Burchardt and Baerensprung had described a similar organism under the name of microsporon minutissimum, a minute fungus. Again, Bizzozero of Milan averred that these were bacteria, and occurred in the skin of man as a leptothrix development of bacillus. The point was whether they were the cause of the skin affection. The organism had been described as existing in the moist part of the groin and between the toes, and also in parts kept moist by inflammation. Dr. Payne had not seen the same form of organism before, and it was difficult to believe that it had not the same apparent causative relation to the disease as the organism found in chloasma.—Dr. T. C. FOX showed similar specimens from the thigh of a man suffering from diabetes; they existed in great abundance as long threads ramifying after the same plan as trichophyton; plain tubes and tubes with compartments and moniliform shapes were to be seen.

Dr. HANDFIELD JONES showed numerous drawings of Vessels from cases of Meningitis. He wished to demonstrate the origin of the corpuscles in the rete of the pia mater, and also certain changes occurring in the minute vessels. Dr. Bastian had described the migratory property of the cells eight years ago, and attributed it to amœboid contractions. These changes were not constantly met with. Some of the corpuscles were elongated and notched, and differed from the round or oval ones in a marked manner. The alteration in structure of the vessels and the corpuscular hyperplasia, which was an active process, were probably due much more to a disorder of the vessels than to damage of the tissues themselves. There was a degradation of a specialised tissue; in some of the specimens the piamatral capillaries ended in short tufts suggestive of renal glomeruli.

Dr. SILCOCK showed a specimen of Necrosis of the Lung due to Thrombosis of the Pulmonary Artery; it occupied the greater part of the middle lobe of the right lung, and came from a woman aged forty-four, who had Bright's disease with hypertrophied heart. As there was no sign of previous pneumonia, it was thought that embolism followed by thrombosis of the branch of the pulmonary artery was the cause of the necrosis, and not a consequence of it.

Dr. F. C. TURNER exhibited specimens of Tubercles in the Pulmonary Artery taken from a boy aged fourteen, who had tuberculosis of general distribution. In the main branches of the pulmonary artery clusters of miliary tubercles were to be seen in the endarterium. Weigert had described these miliary tubercles in the veins in nine cases out of ten of tuberculosis, but they had not been observed, so far as he knew, in the larger branches of the pulmonary artery.

Dr. S. WEST showed several Mediastinal Tumours. In one instance the man died suddenly, and the pneumogastric nerve was found to be greatly thickened; the nerve itself was not much altered, but a large mass of small cells grew between its fibres; it was a medullary carcinoma. In a second case hemiplegia of embolic origin coexisted; the mediastinal growth was not detected during life, but the vessels were invaded by the tumour, which had spread through their walls; possibly this was the source of embolism. In another specimen the innominate vein was occupied by a large growth. He had observed in this case many small venous thromboses in the legs, arms, and trunk, the cutaneous veins being affected. There was no proof of any direct connexion between the thromboses and the tumour. In the case of a butcher who was gouty a similar kind of thromboses was found in the skin. The tumours illustrated some of the more unusual causes of death.

Dr. HALE WHITE showed specimens of Peripheral Neuritis and Syphilitic Pachymeningitis, taken from a woman aged fifty-two, who had been a hard drinker and had had delirium tremens. For some months past she had had occasional right-sided attacks of convulsions. On admission she seemed partially demented, and would not answer when spoken to. The optic discs were healthy, and there was no facial paralysis. There were wasting, rigidity, and contracture of the right arm, and in a slight degree of the leg. The liver was enlarged and rough. After she had been in hospital a few days she was attacked, in the course of seven hours, with sixty-three right-sided epileptiform seizures, in which the face was affected, and which were accompanied by unconsciousness. The temperature ran up to 103°; the patient lapsed into a quiet unconscious condition, and died about eighteen hours after the last fit. At the post-mortem examination there was syphilitic ostitis of the back part of the frontal bone, causing the membrane underneath to be adherent, and under this ostitis, and over the whole of the outer surface of the left frontal lobe for an area bounded below by a horizontal line at the upper border of the first frontal convolution the membranes were quite thick and dense, being of a yellowish gummatous colour in parts and adherent to the brain, except where separated by thick yellow pus, of which there were several patches. The brain substance underneath was hardly affected. The same condition, but to a less degree, was present on the inner surface on that part of the marginal convolution immediately over the genu of the corpus callosum, causing the marginal convolutions to be adherent. With the exception of cirrhosis of the liver, the rest of the body appeared healthy. Microscopical examination showed that the pachymeningitis was characteristically syphilitic, being composed partly of fibrous tissue and partly of gumma, consisting of degenerate cells in a delicate meshwork; the nerve cells in the convolutions underneath were not at all affected. Examination of the skin from the finger showed that the fibrous sheath around the nerve formation was considerably thickened and sent in thick septa between the individual nerve fibres. These were much degenerated; in many of them no axis cylinder could be seen, and all that could be observed was the granular material into which the white substance of Schwann had become converted. Under very high powers sometimes the axis cylinder could be seen among all this granular material, itself so much distorted and degenerate that it could only be with difficulty distinguished from its surroundings. In the same section there were many affected and many healthy fibres; the change was always very chronic, there being no small-celled nor vascular increase. The median nerve appeared healthy to the microscope. The columns of Goll and central parts of the lateral columns in the spinal cord stained rather deeper than the rest of the cord, and there seemed to be a slight increase of neuroglia. This case presented many points of interest—(1) a syphilitic pachymeningitis following syphilitic ostitis was a rare though recognised sequence; (2) the right-sided Jacksonian epilepsy following the left-sided lesion was very interesting; (3) the peripheral neuritis, in view of the recent discoveries chiefly of the French workers, was important as showing that the usually received notions concerning it were correct. With respect to its etiology, it was probably due to the alcohol, but possibly to the syphilis; and, lastly, the slight change in the cord, also probably alcoholic, was to be noted.—Dr. HADDEN thought there was unquestionably neuritis, most probably due to alcohol.—Dr. WHITE said there were no symptoms referable to the part from which the nerve was removed.

Mr. BILTON POLLARD showed two specimens of Duct Papilloma of the Breast. The first specimen had been sent to him by Mr. Farnell of Eastbourne. The patient, from whom it was taken was fifty years of age. Twelve years before the removal of the breast, when six months advanced in pregnancy with her last child, the patient noticed a slight discharge of blood from her left nipple; three years later a warty growth projected from her nipple. This growth was repeatedly removed without permanent benefit, and two years and a half ago, when Mr. Farnell first saw the case, there was a growth in the breast beneath and around the nipple. The lymphatic glands were unaffected. In Oct. 1885 the breast was removed. On section the growth was invested with a distinct fibrous capsule, except at the

place where it was sprouting on the surface. The growth was composed of two portions, of which one was very friable and the other was dense and firm. The structure of the friable portion was that of an arborescent papilloma; there was a very delicate stem of fibrous tissue with innumerable offshoots, all lined with columnar epithelium; in some places adjacent papillary processes were seen bending towards one another as though about to coalesce at their extremities; in others the appearances indicated that a junction had been effected; and in others, again, secondary villi were visible sprouting into the included spaces. The dense portion of the growth was encapsuled just like an adenoma of the breast; its microscopical structure was that of an adeno-fibroma, but in the general arrangement of its tissues it bore a striking resemblance to the friable portion of the growth. Mr. Pollard suggested that the adenomatous portion was but an advanced stage of development of the papillary portion resulting from the union of its adjacent villous processes and an increase in the fibrous groundwork of the growth. He also thought that such a method of development would explain the absence of excretory ducts in adenomata of the breast. He was indebted for the second specimen to Mr. Godlee. In it the tendencies of the growth were rather towards malignancy, although there were no evidences of malignant action in the patient. The growth, which closely resembled the first specimen in its structure, was in many places invading the surrounding fat. Mr. Godlee had shown to the Society a similar case in which the axillary glands had been secondarily affected, and Cornil and Ranvier described a similar growth under the title of villous carcinoma. Mr. Pollard thought the specimens of interest as suggesting that papillomatous growth within the mammary ducts might under certain conditions develop into simple tumours—adeno-fibromata,—and under other conditions develop into true duct cancers.—Mr. SHATTOCK said that he had seen two specimens of cysts of the breast with papillary growths identical in microscopical appearances with the specimens exhibited.

Mr. BILTON POLLARD showed for Mr. Christopher Heath a specimen of Secondary Epithelioma of the Lower Jaw, removed by Mr. Heath at University Hospital from a man aged fifty-five. The primary growth was first noticed in the lower lip two years and a half ago, and was excised two years ago. A year ago the secondary growth began to form, and on admission there was a swelling surrounding the body of the lower jaw and involving the tissues in the left submaxillary space. The tissues removed consisted of the left half of the body of the lower jaw, together with the angle and a small portion of the ramus, considerable portions of the masseter, internal pterygoid and mylo-hyoid muscle, and the left submaxillary gland. The jaw was only superficially diseased by extension of the growth to it. The patient's recovery was rapid and complete. The growth was a squamous epithelioma, and the only unusual feature of it was that, though it must have primarily formed in the lymphatic glands, it had so encroached upon the jaw as to simulate a primary growth in that bone.

Mr. W. H. BATTLE showed a specimen of Osteochondrosarcoma of Breast. The patient, who was a widow aged seventy-three, and had had five children, was admitted into St. Thomas's Hospital, under the care of Mr. Mackellar, on Aug. 28th, 1885; amputation of the breast was performed three days after admission, and she left the hospital at the end of a month. The tumour began as a lump on the inner side of the nipple six years ago; it remained stationary, of the size of a pea, for two years, and the ensuing three years it increased to the size of a hazel-nut, and then grew more rapidly; it was painless, the size of an orange, of hard consistence, and composed of two portions—an inner, very hard and rounded, about the size of a walnut, which the patient had noticed for a long time; and an outer, more elastic, the size of a large egg, a more recent development. The nipple was much retracted. The skin over it was movable, except at the inner part, where it was adherent, red, and tense. A small freely movable gland was detected in the axilla. The softer part of the growth was friable and extremely vascular, with numerous hæmorrhages; the smaller portion was very hard and resembled bone. Microscopically, the softer parts were composed of round and spindle cells; the harder, of cartilage, which in places had ossified with the development of Haversian systems. The specimen was rare.

Mr. W. H. BATTLE also showed a specimen of Osteochondroma of the Thigh. The patient, aged twenty-five, stated that he had been kicked by a horse in the left groin. A fortnight later he noticed a lump the size of a walnut in this situation. When he came under treatment three months and a half after the accident, this tumour was of stony hardness and had a slightly irregular surface; it was situated in the diverging angle between the sartorius and the tensor vaginæ femoris, and apparently under the deep fascia; it was movable laterally, and measured three inches from side to side and four inches in its long axis. At the operation it was found lodged in a bed of areolar tissue without any definite connexions. Its structure was so hard as to require a saw to divide it. The hardness of the surface was unequal; this depended on the distribution of the cartilaginous, bony, and calcareous elements of which the growth was composed. The bony part occupied the centre chiefly, but was also scattered in other parts. In certain situations, generally where the cartilage and bone passed into one another, were patches of white calcareous deposit.—Mr. BUTLIN referred to a similar case occurring in the thigh which had been under the care of the late Mr. Callender; the growth recurred two or three times at intervals of about a year. It was a spindle-celled variety, and ossified in all parts except the centre.—Mr. BOWLBY spoke of his own specimen of tumour of the breast which had undergone partial calcification; also of that of Mr. Wood, and of that of Sir Astley Cooper, which was said to consist entirely of bone.

The following card specimens were shown:—Mr. L. Hudson for Mr. E. Crookshank: Photographs of Micro-organisms. Dr. Colcott Fox: Erythrasma. Dr. P. Kidd: Aspergillus Mycosis of Kidney. Dr. Silcock: Fibroid Thickening of Pleura (? Syphilitic). Dr. Sharkey: Perforation of Vermiform Appendix. Dr. Hadden: (1) Tubercular Mass in Supra-renal Capsule; (2) For Mr. Paul, Rupture of Aorta by Muscular Strain. Mr. Battle: Bones from a case of Congenital Syphilis. Mr. E. H. Fenwick: Calculus Extracted per anum. Mr. Churchill: Central Necrosis of Great Trochanter, with Rarefying Osteitis of Hip-joint. Dr. Hale White: A series of specimens of Leprosy for Dr. Rake of Trinidad. Mr. S. Paget: General Symmetrical Psoriasis (living specimen).

CLINICAL SOCIETY OF LONDON.

Aneurysm of Aorta and Galvano-puncture.—Rupture of Aortic Aneurysm into Posterior Mediastinum and Abdominal Cavity, with Remarkable Symptoms.—Impaction of Stone in one Ureter, with Atrophy of the other Kidney.

AN ordinary meeting of this Society was held on the 14th inst., Mr. Thomas Bryant, F.R.C.S., President, in the chair.

Dr. CHURTON (Leeds) read notes of the following case of Aneurysm of the Thoracic Aorta treated by Galvano-puncture. A strongly-built man, aged forty-five, had in 1880 an aneurysm which protruded through the left chest wall. He was then in the Leeds Infirmary, under the care of Dr. Clifford Allbutt, and was treated by iodide of potassium (afterwards continued for three years), and by galvano-puncture upon two occasions. After each puncture pulsation ceased for two or three days, but finally remained as before. The aneurysm, however, did not increase in size until last year. In June, 1885, he was admitted under the care of Dr. Churton, a second tumour having appeared in front of the lower part of the sternum. This grew rapidly. With the concurrence of Dr. Allbutt (now consulting physician to the hospital), Mr. Teale, who had operated upon the patient previously, applied the galvanic needles, fifteen cells of Leclanché's battery being used for twenty minutes. Blood-débris ran from the negative puncture. The pulsation ceased, but returned on the fourth day. The operation was repeated on October 2nd with like result. He began about this time to expectorate two or three drachms of blood-stained mucus daily. On October 27th galvano-puncture was used for the third time. The tumour was tympanitic for a few hours, but did not cease to pulsate. On Nov. 9th it was so much increased in size and its walls were so thin that a fourth puncture was made, Dr. Griffith, the resident medical officer, operating in the absence of Mr. Teale. The current was passed for twenty minutes. Pulsation entirely ceased, and the patient seemed to have gained a respite, but suddenly died twenty minutes after

the operation from rupture into a bronchus of the first aneurysm, which had hitherto given no new sign except the very small quantity of bloody sputum. At the necropsy, an erosion, half an inch in diameter, almost blocked up by a clot to be described below, was found in the upper part of this sac. Except in the arch the aorta was only moderately atheromatous. One testis had undergone fibrosis. The orifice of the first aneurysm was about an inch in diameter; the wall of the sac was as firm as cartilage. The middle of the sac was occupied by a firm clot larger than a cricket-ball; the lower part of the sac was lined by laminated clot, thin around the orifice, gradually becoming thicker above, and quite smooth. The upper aspect of the central clot was rough. A fissure between the wall and the clot connected the two chambers into which the primary sac had been divided by the formation and subsequent partial separation of the clot. It seemed to the author that after the deposition of clot upon the entire sac, with closure of the upper part by formation of a very thick layer, this had been stripped from the roof of the sac by the blood, which found a way through the fissure, and then, enlarging this part of the sac, formed a projection on the exterior of the chest. A constriction in the sac, marking the position of the large mass of clot, suggested this view. The growth of this sac was arrested by the firmness of its wall except at two points both in the upper division or chamber. At one of these points the rupture into the bronchus had occurred. At the other, an orifice, one third of an inch in diameter, which existed at the lower part of the chamber, led to the second sac, which, as well as a third and very small sac, were altogether outside the chest wall. The third sac appeared to have originated by an orifice in the small piece of the wall of the primary sac, which had yielded and had become the upper limit of a short canal leading into the second sac. [The specimen and drawings were shown.] The walls of the second sac were soft, and its interior irregular, except where the sternum, quite uninjured, formed its limit. The front wall was composed merely of skin, and irregular bands or trabeculæ of connective tissue of varying thickness, disposed like the carneæ columnæ of a right ventricle. This was the cavity, as large as an orange, in which the galvanic needles had been inserted. It contained no laminated clot; the surface was smooth and uninflamed. A soft jelly of pinkish colour, too fragile to be preserved, and some blood débris were contained in the cavity. The cessation of pulsation had been due to entanglement of this clot in the short narrow canal leading from the orifice into the cavity. The temporary cessation of pulsation noted in the large aneurysm five years ago was probably due to a similar entanglement of soft clot in the narrow fissure above mentioned. The formation of such a clot and of blood débris in the cavity of a perfectly open aneurysm one would suppose to be not free from danger.—Dr. GIBBONS had the opportunity of seeing the post-mortem examination in two cases of aneurysm treated by galvano-puncture. The first was a woman suffering from aneurysm threatening to rupture externally, which was galvano-punctured successfully. Later, she died, and a firm clot was found at the point of previous puncture. The second case was that of a man suffering from thoracic aneurysm, which also threatened to rupture externally. This was punctured with needles attached to a battery of six Smee's, the operation lasting fifteen minutes. Nine days after, a second puncture was tried for one hour, and a firm clot was formed. After a time, all benefit of former operations having disappeared, puncture was a third time performed; solidification ensued, and the man resumed work. Six weeks later he returned to hospital; sloughing of skin appeared; puncture was again performed, but the edges of the wound becoming unhealthy, death occurred, apparently from pyæmia. The aneurysm was found post mortem to be of the thyroid axis. He believed there was a future in store for electrolysis, especially in gynæcology.—Dr. CHURTON, in replying, said that while disclaiming any right to speak positively, he thought that the clots which were found in the cases mentioned by Dr. Gibbons, being closely adherent to the wall of the sac, must have been deposited slowly upon the lining membrane, and could not have been formed around the needles introduced into the sac, which would, he supposed, be insulated, except at their points.

Dr. PERCY KIDD read a case of Aneurysm of the Aorta, with Extravasation of Blood into the Posterior Mediastinum compressing the Œsophagus and Vagus Nerves, and Rupture into the Abdominal Cavity, associated during life with frequent Vomiting. A labourer, aged thirty-one, was admitted into hospital on Dec. 4th, 1885, in a very exhausted state. He stated that he had been ailing for six weeks and had suffered from a slight cough, but was able to do his work until four days previously, when he took to bed on account of vomiting, shortness of breath on exertion, headache, and a feeling of malaise. He continued to vomit frequently, the headache and shortness of breath persisted, and his bowels were constipated. His previous health had been very good, with the exception that some years back he had contracted syphilis, and six years ago he had "pleurisy." On admission the patient was muscular and well-nourished, but extremely anæmic. On the lower part of one leg there was some partially healed ulceration and pigmentation. His pupils were slightly unequal, the right being larger than the left. Pulse small and weak, but equal in the two radials. Chest: Slight scattered rhonchus and slight dulness at both bases posteriorly; breath sounds rather weaker in the left than right interscapular region; over the manubrium sterni there was weak tubular breathing, but no dulness; heart sounds healthy. Abdomen soft and natural; no spots. Ophthalmoscopic appearances normal. Urine healthy. Temperature 99·0°. The next day there was no noteworthy change except that the pupils became equal; He continued to suffer from vomiting and retching, had a troublesome cough, and the temperature became subnormal. Early on the 7th he became very restless, the pallor increased, and he sank in two hours. At the necropsy the peritoneal cavity was filled with blood, but no source for the hæmorrhage was found in the abdomen. There was a small sacculated aneurysm springing from the third part of the arch of the aorta, which had ruptured into the posterior mediastinum and subpleural tissue on the left side. The effused blood was shut off from the pleural cavity by adhesions, and had burrowed down along the œsophagus, compressing it and the vagus nerves, and had entered the abdominal cavity behind the crura of the diaphragm. The aorta was atheromatous in the arch, but elsewhere was healthy. The heart was slightly hypertrophied, the lungs œdematous, and one testicle was fibroid. The other viscera were healthy. The vomiting was considered to have been due to irritation of the vagus fibres lying along the œsophagus by the pressure of the effused blood.—Mr. HARRISON CRIPPS related two cases of intra-peritoneal hæmorrhage in which uncontrollable vomiting was a marked symptom. A man jumped down from a high dogcart, and soon suffered from severe pain with vomiting every half-hour; he was somewhat collapsed, and there was slight distension of the abdomen. At a consultation internal strangulation was considered to be the lesion, and abdominal section was performed. Much fluid, dark-coloured blood was all that was discovered, but the source of hæmorrhage could not be found. At the necropsy a laceration of the posterior surface of the liver was the only lesion detected. A week or two after this case, a boy who had been run over was brought in, with severe vomiting and considerably collapsed. After death, which took place in two days, hæmorrhage into the peritoneum was found, with laceration of the spleen.—Dr. D. DREWITT remarked that in purulent peritonitis vomiting was very severe.—Dr. W. HADDEN asked if the gullet were much narrowed, and whether the vomiting was from the stomach.—Dr. KIDD, in reply, considered that there was genuine vomiting, which, he believed, was due to pressure on the vagus nerves, though some might have been due to intra-peritoneal hæmorrhage.

Mr. PICK read a case of Impaction of Stone in one Ureter, with Atrophy of the Kidney on the other side. The patient, aged forty-five, was first seen on Feb. 1st, 1884, when he was found to be suffering from almost complete suppression of urine. He had been the subject of dyspepsia, with high-coloured lithatic urine, all his life. Fifteen years ago he passed a small calculus. In August, 1883, he was attacked with severe pain in the hypogastric region, accompanied by inability to pass urine. A catheter was introduced, but no urine was drawn off. The pain, which was of a very intense character, and was accompanied by sickness and vomiting, suddenly ceased, and shortly afterwards he passed a small calculus by the urethra. Two days before he was seen by Mr. Pick he was again seized with intense pain in the region of the bladder, extending upwards in the course of the left ureter and downwards to the testicle on the same side. The pain was accompanied by a feeling of sickness, but no actual vomiting took place. It lasted for about four hours and then

passed off. Since that time until he was seen (a period of over forty-eight hours) he had only passed five ounces of urine. Upon examination he was found to be in no pain, but nervous and anxious about himself. He was sweating profusely. There was no water in the bladder. The urine which he had passed was light-coloured, almost like water, of sp. gr. 1006, and contained no albumen or abnormal deposit. The diagnosis arrived at was that the case was one of impaction of a calculus in the ureter of a patient who had only one kidney, or who had already from some cause had the other kidney permanently destroyed. The patient was ordered to drink half a gallon of distilled water daily, in the hope that this would act as a non-stimulating diuretic and cause the secretion of a large quantity of urine, which would mechanically wash the stone into the bladder. Two days afterwards his condition was manifestly altered for the worse, though it appeared to be due more to nervous anxiety than to anything else. His principal complaint was inability to micturate; he, however, also complained of a considerable amount of pain in the left side of the abdomen, and here there was to be felt a firm, hard, and resisting circumscribed swelling, which was dull on percussion. He remained much in the same state, gradually, however, getting more restless and complaining, but without presenting any fresh symptoms, until the seventh day of his attack, when he was suddenly seized with an intense desire to micturate, and in the course of a very short time passed no less a quantity than seven pints and a half of urine, and with it the passage of three small calculi. From this time his symptoms were at once relieved. His urine, which he passed in natural quantities, contained a little blood, but this soon disappeared, and in a week or two he was, as he expressed it, "quite himself again." He continued well for about a year, until February, 1885, when he had a severe attack of lumbar pain followed by the appearance of blood in the urine, and some time afterwards passed a small calculus by the urethra. On August 3rd of the same year he had a third attack of renal colic, which lasted five or six hours and then ceased, but was followed by the appearance of blood in the urine. On the 11th he had an attack of retention from the impaction of a calculus in the urethra. This was relieved by the passage of a catheter, during which the stone was pushed back into the bladder. This was followed by vomiting, hiccough, and almost complete suppression of urine. He became comatose, and died on Aug. 17th. Permission could only be obtained to examine the urinary organs. The right kidney was found to be atrophied, very granular on its surface, and with only a trace of secreting structure remaining. The left kidney was twice its natural size, its cut surface of a deep-red colour, and much congested. It contained about six or seven small calculi studded throughout its substance, and one large calculus was contained in the pelvis and blocked up the ureter. The ureter itself was natural. The bladder contained a small stone. In reply to the President, Mr. Pick said that the lumbar swelling was difficult to map out accurately, but it seemed about four inches in length, and was considered to be a dilated ureter.—Mr. GODLEE raised the question whether urine might not be rapidly secreted after the removal of an obstruction due to a stone.—Mr. BRYANT inquired as to the state of the right kidney. The treatment by large quantities of fluid could only have been effective under the peculiar circumstances of the case. In his opinion the stone must have been impacted in the upper part of the ureter, which was probably not capable of much rapid dilatation. But it could become dilated as the result of a chronic process, after which he did not think the dilatation could pass away. He related a case of calculus in the bladder in which the child was sent away from the operating theatre because the stone could not then be detected. In the course of the night the child became pale and cold, in a collapsed condition, and died. At the necropsy it was found to have but one kidney, and hæmorrhage had taken place into the pelvis of the kidney. The anæsthetic was assigned as the cause of this hæmorrhage, but death would probably have been attributed to the operation if it had been done.—Mr. A. E. BARKER believed that where we had to do with a large accumulation of urine, a urinary fistula purposely made in the loin would frequently forestall very serious consequences. The risk of the operation would be very small, as also its consequences. In a case in which he had performed this operation the woman was now, and had been for a year past, wearing a urinal; she had no further pain, and was able to follow her avocations. He considered that there were occasions on which this plan might be resorted to with great advantage.—Mr. R. W. PARKER related the case of a boy aged twelve, who was first seen in February, with a history of having fallen over a bench, and having been thereby struck in the lumbar region. He was brought to him because of the passage of very dark blood-stained urine. Under rest the pain and hæmaturia disappeared in a week, and he was not seen till one week ago, when he was again passing blood. There was a large swelling in the lumbar region, which Mr. Parker punctured, and drew off much urine, but no blood. This appeared, therefore, to be a hydro-nephrotic sac, and a free incision was made into it two days later, eighty ounces escaping. The next day no urine escaped from the fistula, and the patient was passing very little urine at all. Complete suppression set in, and within a day or two uræmic convulsions and coma, ending fatally. The right kidney was found in a sacculated condition with calculi, and the ureter was blocked up; the left kidney was a mere sac, and contained many small calculi in its loculi.—Mr. PICK said the right kidney was an example of a congenital deficiency of development; it was but one inch long, like a specimen he had shown years ago at the Pathological Society, which had the size and shape of the supra-renal capsule, with a small renal artery. The treatment in this case was only applicable to very rare cases where but one kidney was functional. The stone, he believed, had lodged at the opening of the ureter into the bladder. As to the ureter, he did not perceive why it should not contract during a period of eighteen months. If a fistula had been made in the loin, it might have done considerable harm. In regard to Mr. Godlee's remarks, he believed that the large quantity of urine was passed before, and not after, the stone had come from the bladder.

The following living specimens were exhibited:—Mr. Pearce Gould: Raynaud's Disease, affecting chiefly the left hand and foot. Dr. Henry White: Cervical Rib.

MIDLAND MEDICAL SOCIETY.

A MEETING of this Society took place on April 7th, Dr. J. Holmes Joy, President, in the chair.

Loss of Conjugate Movements of the Eyeballs downwards, and of Convergence and Accommodation.—Dr. SUCKLING showed a woman aged thirty-eight, who presented these symptoms. She had suffered from vertigo for twelve months. There was no history of syphilis. The pupils responded normally, and the fundus was normal. There was a slight general increase of the deep reflexes, most marked on the left side. In walking the body was held stiffly, and she frequently fell, falling to the left. There was no psychical change. Dr. Suckling thought that the paralysis was due to degenerative changes in the cerebellum.

Paraplegia and Anæsthesia of Legs.—Dr. SUCKLING showed a woman who had been sent to him suffering from paraplegia anæsthesia of the legs, following a fall five months previously. She was of the neurotic type; cheerful, intelligent, energetic, industrious, and eager to get well. After being informed that the application of electricity would cure her, faradisation was employed, resulting in recovery.

Dr. SUCKLING also read a paper upon Paralysis depending upon Idea and Faith-healing.

Glioma of Retina.—Mr. EALES showed an eyeball excised for glioma of the retina in a child aged two years and a half. The vitreous and retina were replaced by the growth, which, however, had not perforated the ocular tunics anywhere; the lens was transparent, and the iris not apparently involved. Microscopical sections of the tumour were typical of glioma; but sections of the optic nerve showed it to be free from infiltration by the growth, and apparently quite normal in condition.

Senile Cataract.—Mr. EALES also read a paper on some points connected with the Extraction of Senile Cataract, in which he insisted on the importance of ophthalmoscopic examination in the early stages of cataract, when only the state of the fundus can be ascertained. Bright's disease and diabetes were perhaps the most unfavourable of all the various conditions of ill-health which tended to bad results of operation. Cocaine locally applied had rendered general anæsthesia unnecessary for extraction of cataract, thus removing one source of danger both to the patient and the integrity of the eye. When all the conditions were favourable, he thought the cornual section of Liebreich with a

small iridectomy just involving the pupillary margin of the iris was a good operation and gave excellent results. The section was most favourable for removing cortical matter without the use of force, and was well placed for early subsequent inspection, while the cicatrix was hardly noticeable afterwards and the iridectomy too small to be attended with any bad results as regards vision or appearances; nor was it extensive enough to cause pain during its performance, no dragging of the iris taking place, compering favourably in this respect with the pain caused in excising the iris down to its root necessary in all the modifications of Graefe's linear section, in which, consequently, the final stages of the operation were often attended with much embarrassement to the operator by the patients having lost their composure. When the conditions were not favourable he preferred the three-millimetre flap modification of of Graefe's operation, in which case he often performed the iridectomy previously, as in cases where glaucoma was present or its tendency suspected, or the iris non-dilatable or vascular, or Bright's disease present. He had found Forster's method of maturing the lens a most valuable method of dealing with cases of very slowly maturing nuclear cataract, affecting both eyes equally, and a means of saving months of waiting and forced idleness to the patient.

Notices of Books.

Kystes: Tumeurs Perlées et Tumeurs Dermoïdes de l'Iris. Par E. MASSE. Paris. 1885.—The explanation of the formation of cysts in or on the iris has always been felt to be a difficult chapter in ophthalmology. The first case recorded appears to have been by Mackenzie in 1832. Dr. Guépin, Mr. Hulke, Rothmund, Wecker, Monoyer, and others followed with detailed reports of cases. The great frequency with which the formation of cysts of the iris was preceded by injuries to the eye was clearly established from these memoirs; and the last-named two authors drew a distinction between liquid and solid and pearly tumours of the iris. Bowman, with Mackenzie, thought that these tumours formed in consequence of the secretion of a fluid between the iris and the posterior layer of epithelium, so that the epithelial cells of the uvea formed their posterior wall. Rokitansky believed that they proceeded from the proliferation of the connective tissue in the fibrous stroma of the iris. Wecker thought that the mode of formation of these tumours was that in the cysts a fold of the iris was made by the injury, and that an anterior or posterior synechia resulted, forming a cavity enclosing a little fluid; whilst in many instances of the pearly tumour a cilium became implanted on the iris. M. Masse admits three varieties of tumours, cysts, pearly tumours, and dermoid tumours, and has collected a large number of cases of each. He has made many experiments to determine the mode of origin of cysts of the iris. He transplanted portions of skin into the anterior chambers of the eye in rabbits, and found that they readily became attached to the iris; and whilst part underwent resorption, another part grew and formed the commencement of a pearly tumour, which, however, remained always of small size. Portions of cornea thus transplanted also grew, and formed translucent tumours. The experiments of M. Masse seem to establish in the most satisfactory manner that a large proportion of cysts of the iris, if not all, are the result of the transplantation of normal tissue by some accidental traumatism. In regard to treatment, he recommends waiting till the patient experiences some trouble in the affected eye. It should then be completely extirpated by incision through the cornea and iridectomy. M. Masse has added to the value of his paper by an excellent bibliography, and he gives two plates showing well-marked varieties of the disease.

A Text-book of Inorganic Chemistry. By Professor VICTOR VON RICHTER, University of Breslau. Authorised Translation by EDGAR F. SMITH, Professor of Chemistry in Wittenberg College, Springfield, Ohio. Second American from the Fourth German Edition. London: Kimpton. 1886.—There are many merits in Professor von Richter's little text-book, and it is not wonderful that the English version has so soon reached a second edition. The author has brought the scientific record well up to date, and has rewritten many parts. Thus, we have a sufficient account of the liquid forms of the gases formerly called permanent, such as hydrogen and oxygen, and a clear statement of the periodic law, in which, however, we are sorry to notice that the name of Newlands, the real discoverer, is omitted. The section on Crystallography is one of the best in the book.

Hospital Sisters and their Duties. By EVA C. E. LÜCKES, Matron to the London Hospital. London: J. & A. Churchill. 1886.—Miss Lückes is already well known as the author of some excellent "Lectures to Nurses," and we were prepared to find her present work, which is addressed to hospital sisters, full of sound practical information and advice. Those who are most familiar with the working of hospitals under the modern system of nursing will best appreciate the great importance of a due knowledge of their special duties and relations to other officers of ward sisters. Miss Lückes deals with these matters in a clear and commonsense style, and her book cannot fail to be useful to those for whom it is specially intended. On every page we find evidence of Miss Lückes' thorough acquaintance with all the details of the nursing department of hospital management. From the chapter on the "Relationship of Sisters to their Patients" we extract the following: "One of the most satisfactory conclusions that long experience of all sorts of patients brings to the majority of sisters is that human nature is worthy of greater respect and admiration than they had previously believed." Further on, in urging sisters to welcome with a kindly word all new patients, Miss Lückes writes: "It must be remembered that they (the patients) are not only strange but ill, and often in actual pain, so that they are not in a normal condition for going through the ordeal of being consigned into strange hands, and unless they are too ill to take any notice, which of course frequently happens, the way they are spoken to on their first arrival will make a wonderful difference to them." In reference to the vexed question of patients' friends we read as follows: "The familiar sight of what appears to us a very unattractive, not to say repulsive figure, the harsh sound of a very gruff voice uttering words that to our ear are not very tender or even kindly, the heavy footfall of most ungainly boots, may be eagerly looked for and welcomed by the patient, and may do more to diminish the terrible sense of loneliness that is creeping over him than our gentlest and most sweetly expressed sympathy could do."

The Liverpool Medico-Chirurgical Journal. No. 10. London: H. K. Lewis.—This number contains an instructive article on a case of Congenital Macrostoma and Deformity of the Ear, by Mr. Rushton Parker. The Significance of the Corpus Callosum, by Dr. J. Hamilton, has already been referred to. Sir Dyce Duckworth has written a clinical lecture on Paralysis Agitans, to which Dr. James Barr has appended a case of the same disease. Mr. Robert Jones has contributed an article on the Abuse of Rest; Dr. Emrys Jones, some notes on Iodoform in the Treatment of Eye Disease; Mr. Lowndes, some notes of post-mortem examinations. A special new feature of the journal is the introduction of reports on recent practical advances in medicine and surgery: Antipyretics by Dr. Barr, and Antiseptics by Dr. W. Alexander. The journal is the organ for the Transactions of the Liverpool Medical Institution. Mr. Rushton Parker contributes a paper on Hernia, based upon seventy-four operations. In a paper by Dr. Richard Caton on the Pathology and Treatment of Chorea, we are sorry to find canine chorea and human chorea are not sufficiently differentiated in all varieties. The Pathology of Syphilis is discussed by Mr. A. Barron, and its treatment is the subject of a paper by Dr. James Wilson. Dr. Francis Imlach contributes a paper on Ovarian Abscess and Pyo-salpinx.

THE LANCET.

LONDON: SATURDAY, MAY 22, 1886.

THE wholesale projection of the Privy Council into the affairs of the medical profession is one of the blots of the Government Bill which we have been careful to expose. We are glad to admit that our representations have not been disregarded. The amendments proposed by Sir LYON PLAYFAIR greatly reduce the frequency of the necessity for the sanction of the Privy Council; and undoubtedly, if the Medical Council was one likely to work well, there need be, and there would be, little occasion or excuse for interference. But this is the very point. There neither exists a good Council, nor is one to be created by the Bill. One more direct representative of the profession has been conceded to England, which brings the whole number of direct representatives up to five. Sir LYON PLAYFAIR seems to have felt the force of the objection that the proportion of direct representatives, espetially those of England, to the representatives of corporations, was very small, and he has diminished the Crown representatives by one and given it to the registered practitioners. We must be thankful for crumbs when we cannot get half a loaf, but we think that the Crown representatives might well have been reduced to four, and the number of direct representatives raised to six. It is not denied that the original design of Crown members was to secure through the Government the representation of practitioners unconnected officially with the medical corporations, whose excessive and individual representation has been the weakness of the Council, and which unfortunately is not dealt with in this Bill as it was in that of the previous Liberal Government. A further reduction of the Crown representatives would be the more reasonable, as the interference of the Crown, through the Privy Council, is still provided for in the Bill.

Is there any chance of an honest attempt to make the thorough changes in our examining system which have been desired by medical reformers for a generation, and which have been recommended by the Medical Council and by a Royal Commission? We fear there is not. In the amendments printed we see no sign of this. One set of amendments indicates that the corporations are dissatisfied with the favour shown to universities in recognising their right *singly* to grant a complete qualification, whereas the corporations must combine, two or more, to be able to give a full qualification. Sir HENRY HOLLAND represents these amendments, as he does also another to secure and empower the registration of diplomas in Public Health, whether from a university or a medical corporation, Sir LYON PLAYFAIR strangely proposing in an amendment only to register those sanitary diplomas which are granted by universities. We can see no reason for this invidious distinction But all this is a mere fight for pre-eminence between universities and corporations. Any adequate Bill would have recognised the clear distinction between universities and corporations. It would have recognised the view that corporations exist mainly to grant the ordinary licences to practise, while universities exist to grant something more—viz., a Degree—after an examination of a higher character than that minimum examination which has to be passed for an ordinary diploma. It is no less desirable for the reputation of the profession that the universities should be kept up to a standard above that of mere competence than it is that the minimum examination of the corporations should be a sound test of competence. The Bill does not attempt to recognise any such difference in the functions of universities and corporations. It does not, however, treat universities and corporations impartially. It assumes that each single university can grant a full qualification, and that each single corporation is under a disability of granting a *complete* qualification, whatever the completeness of its examinations. We cannot wonder that there should be grave dissatisfaction on the part of the corporations with such an assumption. The London College of Physicians, for example, gives a thorough examination in all branches. Is it to be tolerated that it shall recognise the *necessity* of going into combination with another body before granting a full qualification? It is true that it has chosen for a time, under certain conditions, to act conjointly with the sister College; but to have its disability expressed and stereotyped in an Act of Parliament, and to have the universities placed in the favoured position of granting full qualifications, with no test applied as to the *higher* standard of their examinations, is too much for flesh and blood as it exists in corporations. Let us leave out of view the Corporation and its interests to consider the claims of a man who in this College or any other *single* college has passed an ample and fair examination in medicine, surgery, and midwifery. How can it be right to demand that such a man shall go through the mill of a second college, in the same subjects, and pay a second set of fees? It cannot be right. It is of no use for Sir LYON PLAYFAIR to boast that he is securing complete examination. That is secured in the one College. What he insists on is that two corporations must combine in order to give one qualification. The uninitiated member of Parliament may think this is in the interest of the public. It is not so at all. It is an attempt to maintain two corporations where only one is wanted, and to do so at the expense of the medical profession in perpetuity. The corporations are selfish in the matter, and if they rebel now it is because they are offended at the superior position of the universities in the Bill, which deserves to fail for want of thoroughness. There is also the risk of all the corporations that have hitherto been condemned to give only single diplomas taking advantage of Clause 5, and with assistant examiners from the Medical Council giving a qualifying examination—a risk, of course, that involves a great number of different and competing bodies, which it will be difficult and very

costly to supervise. Finally, there is the great defect in the Bill of any serious attempt to strengthen the penal clauses for using false titles and for various forms of sham and deceptive practice. At coroners' inquests and in the law courts we are constantly and painfully reminded of the necessity for such a change in the penal clauses, and yet the subject is neglected by the Government and left to be dealt with in the Bill of a private member.

THE lives of WILLIAM CHESELDEN and ANTONIO SCARPA are the themes of interesting studies by the eloquent and sympathetic pen of Dr. B. W. RICHARDSON, in the last two numbers of his *Asclepiad*. While doing justice to rare powers and enduring work, he has not entered into many biographical details, of which some are worth recalling. Best known as an anatomist, and for his method of lateral lithotomy, CHESELDEN was so good an artist that Putney Bridge and the Surgeons' Hall at the Old Bailey were erected after his designs. The operation for artificial pupil which he originated was first performed in 1728, the very year of JOHN HUNTER's birth. Twenty-one years later, as recorded by their contemporary, BENJAMIN HUTCHINSON, in his "Biographia Medica," CHESELDEN, at the request of Dr. WILLIAM HUNTER, allowed his brother JOHN to attend him at Chelsea Hospital for his first lessons in the rudiments of surgery. CHESELDEN had been himself fortunate in his early training, as he was a resident pupil of the distinguished anatomist and surgeon, WILLIAM COWPER, best remembered for the glands which bear his name. It is no disparagement of JOHN HUNTER's merits to dwell on the rare advantage which attended his entrance into the profession under three such masters as his brother, WILLIAM CHESELDEN, and PERCIVAL POTT. ANTONIO SCARPA's fortune was in kind similar, for he was the favoured pupil of G. B. MORGAGNI, who in his classical work "De Sedibus et Causis Morborum," laid the foundation of pathological anatomy and clinical medicine, as pillars of the modern medical edifice. When stricken with blindness, MORGAGNI chose SCARPA for his assistant and secretary; and they found common intellectual solace from their severer studies, in the Latin classics for which MORGAGNI had had a life-long predilection and SCARPA had shown very early aptitude. All the great men to whom we have incidentally referred were scholars, with the solitary exception of JOHN HUNTER whose youthful days appear to have been wasted in the Grammar School of Long Calderwood, his birthplace; he never seems to have acquired or cultivated a taste for literary pursuits; while SCARPA, who most closely rivals him for depth and variety of anatomical, physiological, and surgical research, was a writer no less elegant than prolific. His letters to HENRY WEBER, of Leipsic, "De Gangliis Nervorum, deque origine et essentia Nervi Intercostalis," are models of pure Latinity; and he appears a worthy countryman of METASTASIO in his biography of GIAMBATISTA CARCANO LEONE, the favourite pupil and devoted assistant of GABRIEL FALLOPIUS.

Latin and Italian were equally familiar to SCARPA with pen and speech; and he mastered English, French, and German in the wide scope of his reading, and by not only visiting, but working in, the European capitals. In Paris FRÈRE CÔME, VICQ D'AZYR, and WENZELL; at Gottingen, BLUMENBACH, RICHTER, and WRISBERG, were his masters; in London he studied under the HUNTERS and PERCIVAL POTT; and, curiously enough, first learned from CRUIKSHANK how to display the lymph by injection with mercury, although the existence and function of these vessels form one of the many discoveries justly due to the Italians. Early association and animated rivalry with GALVANI at Bologna must have acted as a very potent stimulus to SCARPA's taste for physical research, in cultivating which he had the incalculable advantage of long colleagueship with VOLTA when their powers were ripest.

Hypogastric lithotomy was the object of special studies, both by CHESELDEN and SCARPA. The former takes precedence not merely in date but for the importance of the treatise which he published in 1723 on the High Operation for the Stone. This volume deserves special notice at a time when the procedure which it describes is enjoying the favour common to revivals. The book having no index or table of contents, a superficial observer is apt to look upon the 180 pages of which it consists as devoted to CHESELDEN's practice; but this, with a careful anatomical description, cases, and ten plates, only comprises thirty-three pages besides the preface, from which one passage may be quoted in evidence of CHESELDEN's candour and modesty: "In my own account of this operation I have fairly set down everything that I judged most material to be known, without the least disguise or partiality to myself, and that the reader might see what had been before done, and that I might not be suspected of arrogating to myself any part of this operation." In one of the quoted cases two stones were removed above the pubes from a gentleman aged about seventy. The stones weighed a little over four ounces each, and the patient recovered without any bad symptoms. The remainder of CHESELDEN's treatise under notice is devoted to translations of memoirs on the same operation by PIERRE FRANCO, DIONIS, HILDANUS, and other masters, concluding with a short original appendix from CHESELDEN's pen entitled "Two Cases to show that Wounds into the Abdomen are not exceeding Dangerous, though the Guts should appear or Thrust out at the Wound." In one of the cases (a female aged seventy-three), with gangrenous umbilical rupture, CHESELDEN found her "with about six-and-twenty inches and an half of the gut hanging out mortified. He took away what was mortified, and left the end of the sound gut hanging out at the navel, to which it afterwards adhered, and she recovered."

Although CHESELDEN's life-work must ever remain an integral part of the history of surgery, his name is unaccountably omitted from the last edition of the "Encyclopædia Britannica." Like SCARPA his rise was rapid. At twenty-three our countryman was F.R.S., and at twenty-two the Italian was appointed to the chair of Anatomy in the University of Modena. Academic honours and wealth fell to the lot of both. The French Academy of Sciences paid CHESELDEN the rare compliment of deputing SAUVEUR MORAND to visit London to study and report upon his method of lithotomy, and at the foundation of the Royal Academy of Surgery in Paris CHESELDEN was elected by acclamation its first foreign associate. On SCARPA NAPOLEON conferred the order of the Iron Crown; and then, as a special token of regard for his talents and his independence, released him from the obligation of taking the

oath of allegiance, to be free from which he had absented himself from Pavia. Not so equal was the fortune of the two great surgeons in survivorship. CHESELDEN, like the two HUNTERS, died within a few months of sixty-five. SCARPA reached eighty-five, close upon the age of his first master, who touched eighty-nine. It has been said that eminence is often a question of survivorship, a proposition capable of wide illustration, but with many notable exceptions in science as in the arts. DUPUYTREN died at fifty-seven, VESALIUS at fifty, BICHAT at thirty-one; yet, looking down the life records, in their published works, of such men as MORGAGNI and SCARPA, it is inconceivable that they could have accomplished what they did, had they not been endowed with most vigorous constitutions and spared to patriarchal age.

Twelve pages of Dr. RICHARDSON'S *Asclepiad* article, already referred to, are devoted to SCARPA'S labours, and the erudite record is certainly a prodigious one. For fertility amongst anatomical, physiological, and surgical writers, ANTONIO SCARPA has scarcely a rival besides CHARLES BELL; but, contrary to what might be predicated from their nationality, the Italian excelled in calm observation and rigid induction. Both were marvels of versatility; but BELL was too imaginative and impressionable to reach the philosophic standard, towards which SCARPA toiled with fixed gaze and unfaltering step.

ON Tuesday next, the 25th inst., an extraordinary meeting of Convocation will be held at Burlington-gardens at 5 P.M., for the reception and consideration of the report of the Special Committee which was appointed in December last, on Mr. MAGNUS'S initiative, after Lord Justice FRY'S scheme had been rejected. The report of this committee of twenty-five follows so faithfully on the lines laid down in Mr. MAGNUS'S circular of Dec. 1st, 1885, and is so evidently a mere amplification of that circular, that we might have been spared the suspense and waste of time. In reviewing his proposals on their appearance, we pointed out that with the exception of the last two—viz., the question of professorships &c. of higher education, and a fixed State endowment,—they might practically run on all fours with those whose details were worked out by Lord Justice FRY; and this opinion has been fully borne out by the present draft scheme. We find in it no such differences from that presented by the former committee as to justify or even to excuse the action of those members who are responsible for its production, who in November last voted against Lord Justice FRY'S amended motion, "That the House now consider what amendments, if any, be made in the said scheme, and that such amendments, if any, be made in the form of instructions to a committee of revision." A Council of Education, with some members elected by the separate faculties in Convocation, as a weak and clumsy substitute for proper faculties and boards of studies; an indefinite for a precise indication of what are to be constituent colleges; the omission of the words "in or near London" in reference to the colleges; and a direct addition of two members by Convocation to the Senate, are the main alterations suggested by the new committees. Six months have been allowed to pass by, so that these details might be worked into the scheme, and permit it to go forth to the world under its present auspices, whereas they might properly have been discussed as amendments when Lord Justice FRY'S plan was under consideration. The outcome is a little less power and influence for the teachers, and a fractional increase of them for Convocation. We hope that the jealousy of the graduates may be allayed by these concessions, and that this scheme may pass, although we much prefer the former one. Any scheme which will secure a more intimate association between university examination and university teaching, and which will confer a substantive voice in the government of the University upon the teachers and examiners, is so far preferable to the present chaotic condition of higher education in London, that we shall not cavil at its details, or at the safeguards by which it has to be surrounded out of deference to the distrustful attitude of some graduates and senators. It can only be adopted by Convocation as a basis of conference with the Senate, and is sure to undergo considerable modification before that body consents to apply for the new charter into which it can be embodied. The proposals for promoting higher education and for obtaining a fixed endowment from the State are good and easy of adoption, and we only hope that the money may be forthcoming; but it is at least doubtful whether the conferring of honorary degrees will not be a great mistake.

Annotations.

"Ne quid nimis."

HOMES OF THE WINDSOR POOR.

AN article in the *Morning Post*, calling attention to the need for the sanitary improvement of certain parts of Windsor, has been the subject of warm discussion by the Town Council of that borough. We gather from a report of recent proceedings of that body that the misfortunes which accrue to the inhabitants of unhealthy areas are shared, though doubtless to a less extent, by those of their fellow-townsmen who are better circumstanced. The reputation of a town must have its influence upon trade and general prosperity; and it is indeed fortunate that this should be so. Where a local authority is negligent in enforcing all the powers that it possesses, it deserves to be thought of as one that is careless of the health interests of the community; and the injury which results from this opinion is often an incentive to work which should be undertaken from a higher motive. If Windsor is suffering from loss of trade, the remedy is in her own hands. The Council cannot be surprised if holiday-makers, in choosing a locality which they intend to visit for the purposes of health and recreation, have some regard to its sanitary condition. A town may have many natural advantages, but if it have within its districts that which may serve to foster disease, there is an element of risk to visitors as well as residents which cannot be overlooked. Windsor, therefore, for every reason, should proceed without delay to put itself in order; and this, we understand, the Royal town is going to do; but time is passing, and in the meanwhile the reputation of the town suffers. It has been proposed that the reconstruction of the old and defective portions of the town should be undertaken in honour of the Queen, during her year of jubilee. The thought is worthy of a Royal borough which has within it an ancient Castle of which England is proud, and which is a residence of the Sovereign. But it is high time that a substantial beginning of this project should be made; unless this is done, we fear that Windsor will not regain the confidence she has lost.

THE NORTH-WESTERN ASSOCIATION OF MEDICAL OFFICERS OF HEALTH.

ON Thursday, May 13th, this Association were hospitably entertained by the Mayor and Corporation of Salford. Dr. Tatham, the medical officer of health for the borough, introduced the members and associates to the Mayor and Chairman of the Health Committee, at 2 P.M., at the Town Hall; and after a champagne lunch had been disposed of, the party proceeded in conveyances to inspect the Winton Fever Hospital, the disinfecting station, and the extensive sewage-works at Mode Wheel. Mr. Jacob, the borough engineer, courteously acted as guide over the works, explaining the details of the process adopted (mixing the sewage with lime and turning it into tanks to settle), and then invited those present to adjourn to the board-room, where coffee was served. Here Dr. Tatham delivered an address on the Notification of Cases of Infectious Disease and their Isolation in Hospital as practised in Salford, and passed in review the steps taken by the Sanitary Authority for the improvement of the sanitary condition of the town. In the course of his remarks he stated that in 1867, when the Local Health Committee first came into existence, the average annual death-rate of the borough was not less than 31 per 1000 of the population; whereas in the five years ending 1885 the average annual death-rate was less than 23 per 1000. At the close of Dr. Tatham's address, Dr. Kenyon, of Chester, congratulated the Sanitary Authority on being so ably advised, and on the public spirit displayed in attempting and achieving so much for the health of the community. In the name of the North-Western Association of Medical Officers of Health, he heartily thanked his Worship and the Corporation for their hospitality and courtesy. Mr. Vacher, of Birkenhead, endorsed all that Dr. Kenyon had said. The result of the efforts made at Salford should encourage other urban authorities to be as active and persevering; and it might be that one effect of the Mayor's invitation would be to introduce sanitary reforms into districts where hitherto little had been done, and where neither hospital accommodation nor disinfecting apparatus were provided.

PHYSIOLOGICAL EFFECTS OF MASSAGE.

DR. F. GOPADZE has published a series of observations undertaken with a view to determine the effect of massage on the transformation of the nitrogenous principles of food. He has investigated the history of the subject, and finds traces of it in a Chinese work 3000 B.C. Dr. Gopadze finds that though there has been a general tendency amongst authors to assume that massage increases the assimilative power, no exact observations on the subject have hitherto been published. He therefore obtained the co-operation of four medical students, who for three consecutive weeks became inmates of Professor Manassein's clinic, and lived on certain articles of food—bread, milk, soup, veal, and roast beef, the quantities ingested being accurately noted. The nitrogen in all the samples of food, and in the fæces and urine excreted, was determined by the Kjeldahl-Borodin process. Massage was practised for from twenty to twenty-five minutes once a day two or three hours after food. The operations were commenced by *effleurage*, beginning from the extremities and working towards the centre. This was followed by *massage à friction, pétrissage, tapotement*, a second *effleurage* of each part concluding the whole. The temperature was subsequently taken, and in some cases sphygmographic tracings. In all four cases the appetite was decidedly increased, not only during the week in which massage had been practised, but after it had been stopped; thus, one of the subjects took an average daily quantity of 24·95 grammes of nitrogen during the first week, 30·97 during the second or week of massage, and 29·57 during the third week. Similarly the amount of nitrogenous transformation was augmented during the continuance of massage in all four cases. The augmentation persisted in two of the cases, but in the other two the transformation was less during the third than during the first week. In Case 1 the nitrogenous transformation was increased 3 per cent. during the second week and 1 per cent. during the third. In Case 2 it was increased 1 per cent. during the second week, but diminished 11 per cent. during the third. In Case 3 it was increased 3 per cent. during the second week, but diminished 10 per cent. during the third. In Case 4 it was increased 4 per cent. in the second week and 3 per cent. in the third. The quantity of nitrogen assimilated increased in all four cases, independently of the amount of food ingested. During massage two of the subjects gained slightly in weight, the other two losing weight; but during the week following the one in which massage was practised all four gained. The axillary temperature decreased for about half an hour after the operation to an extent varying from 0·1° to 0·5° C., after which it began to rise, attaining its original figure, or from 0·1° to 0·3° below it, about an hour after the end of the *séance*. The respirations became more frequent, and were of a deeper character. The effect on the pulse varied with the character of the massage. When this was carried on lightly, the pulse became more frequent; but when the manipulation was more forcible, the pulse became slower. The effects in both cases persisted for an hour or more after the termination of the operation. In conclusion, the author suggests that massage should prove useful in chronic gastro-intestinal catarrh, in chronic constipation due to an atonic condition of the intestines, also in various cases where there is a lack of tone in the abdominal muscles. He also thinks that the practice of massage should be a subject of instruction not only in the Military Medical Academy of St. Petersburg, but in all the medical faculties of the empire and in the institutions for training "feldshers"—a semi-educated class of men who act as hospital sergeants, and after retiring from the army are put in charge of village communities where there is no medical man.

HOUSES LET IN LODGINGS.

THE vestry of the parish of Bermondsey last week obtained a conviction of the owner of a house in Long-lane for a breach of one of the vestry's regulations as to houses let in lodgings. The house had been registered, and the requirement to prevent overcrowding was that no room should be occupied that did not provide 300 cubic feet of air space for each adult or two children if used as a sleeping room only, and 400 cubic feet if used for day purposes as well. The inspector appointed to enforce the Act found that in four rooms the number of inhabitants was such that this amount of cubic space for each individual was less by fully one-third than it should be. The magistrate inflicted a fine of 20*s*., and 6*d*. a day for forty-nine days during which the regulation was disobeyed, and stated that this mitigated penalty was due to the defendant's plea that "she was no scholar, and had erred in ignorance." It was stated that this was the first conviction under the Act which empowers the regulation of lodging-houses, and if this be the case, an Act which offers the only effectual remedy for preventing overcrowding in this great city, has been allowed to be inoperative for twenty years. Doubtless overcrowding can be dealt with apart from regulations, but the tedious process of serving notices, of obtaining a magistrate's order, and only procuring a penalty when this order is disobeyed, would have rendered the employment of a much larger staff necessary than the vestries have been willing to provide. The result has been that overcrowding has remained to a great extent unchecked, but the ease with

which this difficulty is overcome by the adoption of regulations under the 35th section of the Sanitary Act of 1866, in enabling the vestries to obtain a penalty within a few days of the discovery of the offence, should commend these powers to every authority that desires to do its work efficiently.

THE MICROZYMES.

THE battle of the microbes, which has been raging for three months in the French Academy of Medicine, is now brought to a close, and for some time we may expect peace from leucomaines and microbes. To estimate which side has the advantage is not a difficult task. Microbes have too sure a footing to be easily displaced from our etiological catalogue, though from time to time their exact place may be subject to variation, as our knowledge of their life history becomes more complete or our acquisitions of new factors increase. Among the many discourses that the discussion elicited from members of the Academy, the longest was that of M. Béchamp, who, without being exactly a microbist or antimicrobist, reconciled the external and internal (if we may be allowed the expression) origin of disease by the theory of microzymes. According to this idea, every animal cell, its nucleus and nucleolus, and every description of cell, whether white blood-corpuscle, or gland, or epidermic cell, is composed of elementary particles visible to us under the microscope as granules, to which he applies the term microzymes. These have a life and being of their own, and by this fact the life of the cell is maintained; but when the cell itself comes to an end and is disintegrated the microzymes live on, and when free are known to us as bacteria. They may change their form and aggregate, giving rise in this way to the many kinds of micro-organisms that have been described in the order Schizomycetes, such as vibriones, spirilla, &c. The physiological action of these microzymes varies according to the media in which they are developed, and in this way the noxious forms may be rendered innocuous, as seen in Pasteur's cultivation of rabietic virus, or *vice versâ;* the innocent microzymes may under certain bad conditions become virulent, of which such diseases as typhus, small-pox, &c., afford an example. The theory is no doubt attractive, and serves to supply some vacant places which the microbian idea leaves, but will it bear the test of experiment—that is, does such a thing as a microzyme exist? The matter has been placed in the hands of a commission, and we await the verdict.

DWELLINGS OF THE POOR.

A DEPLORABLE account has recently been published of two houses in Warren-street, St. Pancras. In one of these the drains were apparently entirely stopped, and the sewage, running all over a back yard, percolated through the kitchen wall and accumulated underneath the floor. In the front area, it was stated, the objectionable matter likewise declined to run through the drains owing to the traps being defective, and consequently added to the accumulation under the flooring. On the application of the vestry's officers, Mr. Mansfield made an order for closing the houses until the necessary repairs had been executed, and imposed a fine of 25*s*. It is worthy of notice that this large parish has nearly 25,000 houses, that a very large number of these are let out in lodgings, many of them occupied by the poorest and most destitute people, yet for the purposes of carrying out the various Acts of Parliament, the Food and Drugs Act, Canal Boats Act, the Factory and Workshops Act, all the Acts dealing with infectious diseases, and the inspection of houses of all kinds, four inspectors only are employed. In proportion to population there is not more than one inspector to 60,000 persons, and yet it is pleaded that London vestries are not negligent of the duties which devolve upon them. When it is recollected that for each case that goes before the magistrate the inspector must pay several visits to the house before the nuisance is finally abated, some idea can be formed of the insufficiency of the staff to maintain the parish in a proper sanitary condition. But St. Pancras is not exceptional; there are other parishes where the staff is not more numerous, and recent events have certainly not shown any desire on the part of the local authorities for more effective sanitary administration. Londoners can only be grateful for what is done in the absence of something better.

THE DANGER OF TUBERCULAR AFFECTION FROM COWS' MILK.

PARIS cows are said to have been found to be producing milk which contains the bacillus of tubercle, and the Council of Health have advised the closing of all cowsheds in the city. It is believed that the conditions under which these animals are kept have contributed to the production of this disease, and it is hoped that the milk of animals living in country farms is less open to objection in this respect. Of late years much has been done to improve London cowsheds, but the question certainly deserves consideration whether the inhabitants of this metropolis are not exposed to the same risk as are those of Paris. At the present time there are in London more than 800 cowsheds, and the amount of milk distributed therefrom is very large. If it could be definitely shown that London milk is more prone to contain tubercle bacillus than that coming from the provinces, there would be much reason for the Metropolitan Board of Works to follow the same course as that pursued by the Paris authority. It may be found that of the evil effects of milk, of which we have heard much lately, that of the production of phthisis is the greatest; but the power which every householder possesses of protecting his family by boiling all milk which comes upon his premises is so easily within his reach that it is matter for regret that the practice of milk-boiling is not more general.

THE TREATMENT OF YELLOW FEVER.

SENOR ADOLFO MARTINEZ CERECEDO, of Puerto Rico, in an article in *El Siglo Medico* on Yellow Fever, argues that, as Dr. Freire of Rio de Janeiro has demonstrated the existence of cryptococci in the blood, vomit, &c., and as the micro-organisms producing most infectious diseases appear to obtain entrance by the gastro-intestinal tract, the abortive treatment by emetics and cathartics would seem to be the most rational, though much objected to by many South American practitioners. In addition to the emetics and cathartics, Señor Cerecedo advises that hot infusions of mallows or of oranges and lemons should be administered, the heat and the acidity being prejudicial to cryptococci and mycelia. He remarks here that Pacini and Koch have shown that the cholera bacillus dies rapidly in a medium only slightly acidulated, and that Bucholtz and Falk have observed that certain acids prevent the development of the different micro-organisms which set up abnormal fermentation processes in the stomach. Added to which, he has himself noticed from his experience in Puerto Rico that those persons who habitually drink lemon-water enjoy more immunity from yellow fever and malaria than those who abstain from acid liquids. He quite agrees with Dr. Freire as to the effect of salicylic acid on the yellow fever poison, and he advises that the soda salt should be given from the second day, and diaphoresis encouraged by hot drinks and external stimulating liniments. As an ordinary drink at this time lemon-water may be given, which, if nausea exists, may be iced. If the third day brings the remission with diaphoresis, the cold drinks should be replaced by hot. If

the abortive treatment does not prove effectual and the serious symptoms of the second period supervene, he advises recourse to the ordinary methods of treatment.

COMPULSORY SWIMMING IN SCHOOLS.

A FEELING has for some time been steadily growing that all healthy persons should be able to swim, and a good number, at all events, of our schools which are favourably situated include this most useful art in their curriculum of education. Compulsory instruction in swimming has found favour with some continental communities, and indeed there is much to be said for such a course. All children, as is well known, do not take readily to bathing, while of those who do some never take the trouble to learn to swim. Thus it comes about that persons who have spent their lives at the coast—many fishermen, for example—are helpless when immersed in deep water. There is reason therefore in the argument that swimming should form a regular part of school training, and should be compulsory on boys and girls alike, who are not disqualified by bodily infirmity. Even children of poor physique, if not vitally damaged by disease, will often benefit by such a course. Not only is the vigour of every organ and tissue stimulated by the bracing chill of cold bathing, but the skin surface which is cleansed from the products of its excretion must also subserve, much more effectually than one which is not, the nutrition, purity, and working power of the more active organs. Health, without doubt, is largely indebted to a clean skin. In swimming we have these various physiological advantages with that of muscular effort added, and when we think again of its great utility in case of such accidents as every summer invariably brings us, we cannot but plead that the kind compulsion exercised abroad may also be applied at home. Many of our largest towns have the sea or an estuary close at hand, while inland populations which have not this advantage are seldom without one or more swimming-baths.

THE ETHICS OF HANGING.

A PARLIAMENTARY enthusiast on the subject of abolishing the death-penalty some years ago described the issue raised as "a poor man's question." It is impossible not to feel that, setting aside all considerations of class distinction and privilege, this is an inadequate account of the matter. Even granting that the gallows is a terror to the poor rather than to the rich—by no means an accurate proposition—the well-to-do and law-abiding sections of the population have fully as much interest in the questions whether it is expedient to punish capital offences by death, and if so, how the extreme sentence of justice should be executed, as the probable or actual victims of the penalty. It is not perhaps strictly within our province to determine whether the fear of death does operate as a deterrent from crime, although we have the deep interest common to all citizens in this issue, and it will be conceded that, as members of a profession brought into close relation with all classes of the community, and compelled to study human nature in its secret workings, and as an hereditary estate and organisation, medical men have exceptional opportunities of forming a judgment on that point. We incline to the belief that the death penalty *is* deterrent in its effects, although not so much on men or women who are on the verge of committing deeds of violence as on those who, were there nothing to fear, would drift into homicide; and on this ground we are not prepared to urge strongly that the time has arrived at which the State may safely decide to put no more malefactors to death. Whatever may happen in the future, the old Levitical law cannot at present, we fear, be safely superseded. The comparative immunity which this country enjoys from habitual or prevalent crime of the homicidal class is, doubtless, in large measure due to the fact that murder is punished by the ignominious death of its perpetrators. This rule, even though there may be many exceptions, has certainly a wholesome influence on the manners of the population generally. It is shameful to kill, and therefore it is accounted shameful to do acts which may lead to killing. Our more immediate concern, however, is with the manner of executing the law as it stands; and, looking at the whole facts of the case from a physiological as well as a moral point of view, we doubt whether there is any more suitable mode of taking life for judicial purposes than that of hanging by the neck, provided always that the process is carried out with the skill due to humanity. Many alternative means have been proposed, such as destroying life by passing a current of electricity through the body, or by the deprivation of oxygen, or the use of some lethal chamber. Meanwhile we decidedly incline to the opinion that, instead of depending on a public executioner for the carrying out of the death sentence, it would be better, as suggested by the author of a recent magazine article on this subject, to adopt a well-considered general rule of procedure, and to have the penalty inflicted by the warders of our prisons. It is humiliating to society to employ a particular individual to hang the condemned. Better far let the infliction of this penalty, as of others, be a strictly official act performed by the authorities of the prison as other penalties are inflicted. A committee might be appointed to draw up a set of rules which should be carried out strictly. The last act of justice would gain in dignity, and the interests of humanity would be secured by this reform more effectually than by any other which public opinion has yet been asked to consider and approve.

TREATMENT OF ACUTE RHEUMATISM.

THE last number of the *Russkaya Meditsina* contains a communication from Dr. L. Grinevitski, of Rostoff-on-the-Don, who writes that for more than twenty years he has treated acute articular rheumatism with nitrate of potash, two drachms being given daily in raspberry syrup, and a dose administered every two hours. Together with this internal medication he prescribes an ointment for use morning and evening of the following composition: Olei hyosc., 1 oz.; ung. hydrarg. cinerei, 2 dr.; ext. acon., 1 dr. He has tried all ordinary remedies, and finds that on the whole this plan of treatment is more satisfactory than any other, being especially valuable in those cases where salicylates fail to give relief. Generally the disease is brought to an end in from one to two weeks, according to its severity and the time the treatment was commenced. When commenced at the onset of the attack, and before more than one joint was affected, the others were usually spared altogether.

A NEW PLAYGROUND FOR LONDON CHILDREN.

LONDON is not yet so well supplied with public gardens or other open spaces but that another is at any time both acceptable and useful. Attention has lately been directed to the waste ground which lies to the west of the Law Courts, and which is not at present required for the extension of these buildings, on account of its fitness for a temporary recreation-ground. Several reasons combined render it very desirable, in our opinion, that the opportunity thus presented should not be overlooked by those who are interested in the well-being of the poorer town children. The space in question lies in the heart of a populous district, where dirt and overcrowding are almost unavoidable; it is required for no other purpose, and it might at a very moderate cost, in seats, gymnastic bars, and the like, be made to contribute to the healthy growth of many who rarely if ever see the country. We heartily commend this project to the attention of the Public Gardens Association.

GLASGOW ROYAL INFIRMARY AND THE UNIVERSITIES (SCOTLAND) BILL.

OUR Glasgow correspondent writes:—There is a movement on foot to obtain the recognition of the Royal Infirmary Medical School as a College of the University. A proposal that such a recognition ought to be extended to this school comes up for consideration at the next meeting of the Glasgow University General Council. In the meantime the managers of the infirmary have sent a memorial to the Lord Advocate and to the Secretary of State for Scotland, suggesting that in the forthcoming Universities (Scotland) Bill a clause should be introduced embodying the change above indicated. Reference is made to the breaking up of the connexion between the University and the Royal Infirmary in 1875, when the former institution was removed from its old site in the High-street, near to the infirmary, to the extreme west of the city, where it has the Western Infirmary on which to depend for clinical teaching. The Royal Infirmary has a complete staff of able teachers, most suitable accommodation and equipment (provided in 1882, in the form of an extensive range of new building, costing over £6000), and large clinical resources (550 beds) but very few students; and it is thought that there is little likelihood of any increase in the number of students, to whom this magnificent store of clinical material might be made available, so long as the infirmary school continues to bear to Glasgow University the relation simply of an extramural teaching establishment. The memorialists, therefore, urge that Glasgow University should follow the example of Oxford and Cambridge in recognising as colleges schools outside its own walls. There would then be in Glasgow a strong eastern and a strong western school, and the present overcrowded condition of the Western Infirmary wards would be relieved, to the advantage of clinical teaching all round.

QUARANTINE IN ITALY.

La Società Italiana d'Igiene (the Italian Society of Hygiene), whose seat is in Piedmont—that is, in the most enlightened province of the peninsula—held on the 5th inst. an important and prolonged discussion on the efficacy of quarantine, and embodied its conclusions under the following three heads: 1. Experience of quarantine as enforced during the last two years demonstrates that cholera cases afloat and in quarantine stations are extraordinarily rare when it has been possible to preclude the infection from being introduced with soiled articles worn by the passengers or by the crew, or from its being borne with the ship's cargo. 2. Assiduous surveillance of persons practised by the medical officer on board, and the rigorous disinfection of soiled articles in the ship, also practised by him under his own responsibility, are sufficient safeguards against cholera germs being in this way transmitted from place to place. 3. The conditions nowadays of passing to and fro, and the manifold means of communication by land between one Italian seaboard and another, have this effect: that quarantine afloat, even if its utility could be shown, can be eluded by anyone whose commercial engagements make it worth his while to pass from one port to another by sea-route. Hence the fact that quarantine resolves itself simply into a grave impediment to our commercial activity afloat, with that most disastrous of consequences in times of epidemics—to wit, the misery of the seaboard population. These positions, which have long been truisms in England and her dependencies, have finally been accepted by scientific Italy, but politics interpose to set them aside. Seven days' quarantine must, it seems, be fulfilled by all who—from whatever part of the peninsula, to go no further—have occasion to visit such Italian islands as Sardinia and Sicily, and this because in the forthcoming elections it would go hard with Government candidates if the Minister of the Interior failed to humour the prejudices of these backward populations. The indignation of *Il Diritto*, a high-class Roman journal, finds vent in a special article, the tenor of which may be inferred from the following:—"The condemnation passed by science on quarantine, and the inefficacy of the precaution as demonstrated last year, are not enough to spare us these vexatious provisions. In spite of science, in spite of experience, the Minister of the Interior, through his chief secretary, Signor Morana, has political reasons in readiness to justify the opportuneness of 'precautions' rejected by common sense." Our readers may remember that this same Signor Morana issued at the close of the year a report on the last two visitations of cholera in Italy, which was noticed in THE LANCET of January 9th. Nothing could be clearer than his exposure of quarantine as worse than useless.

PARALYSIS OF LARYNGEAL MUSCLES.

THE generalisation so strongly upheld by Dr. Felix Semon, that the abductor muscles of the larynx are more prone to paralysis than the adductors does not carry us a great way but it is very useful as a step to further knowledge. A general cause acting on the recurrent laryngeal nerves appears always to paralyse or weaken the abductor muscles before or more than the adductor. M. Charazac records a case in the *Revue Mensuelle de Laryngologie* of cystic goitre associated with unilateral paralysis of the adductor muscles of the larynx consecutive to compression of the right recurrent laryngeal nerve. During expiration the larynx appeared to be perfectly healthy; the vocal cords left the middle line in a natural manner, so that the glottis presented its normal triangular outline. But during phonation the left vocal cord closed up to the mesial line in good form, but the right did not approach its fellow. We think M. Charazac lays too much stress on his single observation, supposing that to have been a true one, and not to be explained by other causes than the one to which it is attributed. So far the generalisation to which we above referred seems to have been confirmed and strengthened by numerous and carefully observed cases.

CHEAP FOOD FOR HARD TIMES.

WE have satisfaction in observing that the cheap dinner movement has extended beyond the limits of the Board School. It is high time that some attempts were made to effect such a reduction in the price of food as will enable many who have been thrown out of employment through the widespread depression in trade to obtain at least the bare necessaries of life. There are not wanting, indeed, indications that the provision trade in its various branches, between the pressure of competition and a general shrinkage of income, has had to forego a part of its former liberal turnover in deference to the requirements of the time. This is in some ways rather a matter for congratulation. It is a change which comes directly in the interest of the poor. It cannot, however, meet the needs of the most urgent cases, and a special interest therefore attaches to a system which is said to reach even to these, and has been found to work well under the now familiar management of the Vicar of Gateshead. Mr. Ede finds that he can supply a substantial lunch or small dinner of soup, pudding, or pie at the cost of 1*d.* to 2*d.* A really good dinner of two courses, including meat, can be given for 6*d.* The heating and cooking expenses incurred amount to 1*s.* 6*d.* per day. The management of this useful departure in social economy is carried out on ordinary commercial principles, and is in the hands of £1 shareholders, who already, we are told, receive a dividend of 5 per cent. on their investment. An experi-

ment such as this deserves to be repeated on a much larger scale. Should it succeed, it will justify a hope that under no circumstances of depression can it be impossible to guard the poor of this country as a class against absolute starvation.

THE MARTYROLOGY OF MEDICINE.

A HOLIDAY contributor writes on the 13th inst. from Florence:—"Passing through this loveliest of cities, I find it in all its ranks, professional and lay, affected with a sadness that refuses to be comforted, even amid the exhilaration of a Tuscan spring. Marino Rossetti, the right hand of Professor Federici in his clinic, attached for more than a year to the Military Hospital, the *facile princeps* of his fellow-students, already crowned with the first prizes of the career on which rare ability and indomitable working power had launched him, succumbed yesterday to the most honourable of wounds. A patient, it appears, on his way to the hospital, had died on the stretcher on which he was carried. For two days, by some unaccountable remissness, the body had been allowed to lie untouched in the dead-house, and on the third day, when it was already far gone in putrefaction, an order came from headquarters for an immediate necropsy. Those whose business it was hesitated to carry through the examination, but Rossetti, when appealed to, undertook it at once. He had barely concluded the work when he saw he had, in his haste, inflicted a slight abrasion on one of his fingers, which had come in contact with the cadaveric ichor. He cauterised the part forthwith, remarking jocularly 'Se saranno rose, fioriranno' ('If there are to be roses, they will bloom'), little dreaming of the cypress, still less of the laurel. In a few days pyæmia in a very aggravated form declared itself. Professor Federici, his master, and Professor Corradi and Dr. Pedrazzani, his friends, bestowed all their skill and care on him. His colleagues relieved each other day and night by his pillow, and his young wife was unwearied in such tendance as she could give. But in vain. At six o'clock yesterday morning his prolonged struggle, borne with the manliest endurance, was at an end, and with it a career as bright as it was brief."

THE PARIS SANITARY EXHIBITION.

THE sanitary exhibitions held at Berlin, Geneva, and London have inspired the French Society of Public Medicine and Professional Hygiene with the desire to impart similar practical lessons to the Paris population. With the assistance of the State and the Municipality this most active and able sanitary association of France has succeeded in organising a very creditable Exhibition. It is located in the Caserne Lobau, immediately behind the Hôtel de Ville, a building which up to the present time has been known as the place where hundreds of unfortunate prisoners were shot without trial when the Versailles troops entered Paris. Now this structure is devoted to illustrating the means by which life can be saved or prolonged. The exhibition is notable for its purely technical or scientific character, and the total absence of all trading element. In this it compares favourably with the recent Health Exhibition held at South Kensington. But, on the other hand, it is much to be feared that the knowledge it is desired to convey will not spread very far. There is nothing to attract the general public, to whom the meaning of the various exhibits must remain totally incomprehensible. Ninety-five, if not ninety-nine, of every hundred Parisians do not know what constitutes a syphon, they fail to realise the necessity of such a trap, nor do they understand that gas can travel up a soil-pipe and be a danger to health. These elementary facts are taken for granted by the exhibitors; but being ignored by the visitors, the latter cannot feel any interest in the various combinations of traps, ventilators, flush-tanks, and plumbing work. The structure at South Kensington representing a sanitary and insanitary house was a far more effective exhibit for the purpose of illustrating elementary principles of house-drainage. There is time still, however, to considerably improve the exhibition in this respect. Written explanations should be suspended here and there, and the catalogue could easily be converted into a brief treatise on sanitation. One of the most effective lessons given is that relating to the Paris water-supply. Three glass tanks stand side by side, each containing a cubic metre of water. In the centre there is the absolutely transparent drinking-water of the Vanne, on one side the opaque greenish-yellow water of the Ourcq canal, and on the other the grey, turbid water of the Seine. In a small glass the difference would be scarcely perceptible; but when thus shown in the bulk, the Parisians will see how essential it is to abandon the Seine and the Ourcq as supplies of potable water. This necessary reform is not yet fully accomplished. With respect to the individual merit of the various exhibits, we must reserve our opinion for a future issue, as the exhibition, though open, is not quite completed. For the moment it suffices to say that the French manufacturers of sanitary appliances have not been slow to profit by the ideas they were able to obtain at the London Health Exhibition; but, in some respects, they have taken the initiative, and English specialists will find several important improvements at the Sanitary Exhibition of the Caserne Lobau.

THE EMPLOYMENT OF EPILEPTICS.

WE have recently alluded to the need of providing for epileptics in institutions other than asylums organised for the insane. Another great and urgent need is to provide for the employment of epileptics, under conditions of safety, in such way that they may be able to support themselves, or, at least, to contribute towards their maintenance. This is a matter of very great interest and importance. A meeting of the Council of the Charity Organisation Society, at which this project was discussed, has just taken place, and among the speakers were members of our profession well qualified to speak with knowledge on the subject and to offer suggestions to the Council. We trust that the outcome of this and similar deliberations will soon be manifest in the shape of a formulated scheme, which the charitable may be able to help. The class of epileptics has been too commonly confounded with the lunatic population, and measures of special assistance consequently neglected or overlooked.

THE DALRYMPLE HOME FOR INEBRIATES.

THE Home at Rickmansworth seems an institution in which much good is being done, and much experience gathered that will be of use when a capable Legislature comes to deal adequately with the treatment of habitual drunkards. Of patients discharged since the opening of the Home, it is estimated that half have done well, and over 30 per cent. more have improved, so that between 75 and 80 per cent. have received decided benefit. The present Act is not only a poor instrument, requiring the consent of the patient, but it is actually deterrent by requiring that the patient shall appear before two justices. Accordingly more than half the admissions are not under the Act, but voluntary. The most flagrant cases and the great majority of habitual drunkards, of course, are never reached by the Act and are allowed by our absurd notions of freedom to ruin themselves, and too often all belonging to them. Of patients entering under the Act, 4 entered for twelve, 5 for six, and 3 for three months. Of private patients, 6 entered for twelve, 1 for nine, 6 for six, and 4 for three months. Patients show an increasing disposition to stay for

long periods. The element of heredity is made out with more clearness as the history of the disease is more closely studied. Of the 29 cases admitted, 12 had a family history of inebriety. Of the remaining 16, in which a history of inebriety could not be traced, in 2 there was a history of insanity, and in others of hysteria, neuralgia, and other neurotic affections; 3 were traceable to severe physical injury. Dr. R. Welsh Branthwaite publishes several tables of much interest. In one he gives us what he has been able to make out as to the exciting causes in 78 cases: Sociability, 28; nerve-shock, as from domestic, financial, or business trouble, 26; want of employment, 7; influence of occupation, 6; following injury, 3; not assigned, 8.

SURGICAL AFFECTIONS IN THE INSANE.

DR. GINÉ Y PARTAGAS, physician to the Barcelona Asylum, Nueva-Belén, in a clinical lecture published in *La Independencia Médica*, gives a *résumé* of the more important surgical maladies he has met with among lunatics. Erysipelas, he says, and especially erysipelas of the face, is very common, and should be watched for by the physician, as lunatics frequently do not trouble themselves about cutaneous affections. Eczema also is very common. As to furunculosis, he remarks that he has never seen it followed by cure or alleviation of the mental condition. The chief self-destructive propensity of melancholics seems to be to mutilate the genital organs. One man showed the doctor, as an evidence of his operative skill, a testicle which he had contrived to excise with the help of a piece of broken glass. Another patient managed with a similar implement to perform a true œsophagotomy. Dr. Giné remarks that it is wonderful how insensible they seem to the pain they thus inflict upon themselves. With regard to the difficulty of retaining splints on fractures, he says that for many years poroplastic appliances have been employed in Nueva-Belén with the most satisfactory results. In conclusion, he calls the attention of his hearers to the importance of careful examinations of the inguinal and crural regions of lunatics, who may have new herniæ or inflammations in old ones for some time without complaining.

THE MEDICAL COUNCIL AND THE BILL.

THE Medical Council shows signs of waking up. It is summoned to meet on Tuesday, June 1st, but it is possible that before its hibernation is quite over it may be superseded as a judge of foreign diplomas by the Privy Council, and that a Medical Bill may be passed which, under a show of leaving everything and everybody—including unqualified practitioners—very much as it finds them, may produce changes not contemplated by the authors and supporters of the Bill, and which will perpetuate the evils and inequalities justly complained of by the profession.

DIALYSING DIAPHRAGMS.

A PRACTICAL subject of much importance in the chemical laboratory is that of the relative permeability of various disphragms; and the paper by Herr Zott in the *Annalen der Phys. und Chem.* will be therefore appreciated. Goldbeater's skin carries off the most useful, homogeneous, and water-tight material as a dialyser, and is twice as effectual under the same conditions as parchment-paper, which, on the authority of Graham, has hitherto been regarded as the best substance. When the solutions to be dialysed are of such a nature as to attack organic membranes, ordinary clay cells must be still employed, though they are sixty times less effectual than goldbeater's skin. It appears also that the rapidity of diffusion is increased by the complete exhaustion of the air contained within the pores of the dialyser; the rapidity is also dependent more on the increase of volume of the solution than on augmentation of the mass dissolved. After a preliminary exhaustion endosmosis takes place, even in the case of slowly diffusible substances such as colloids. The terms "colloid" and "crystalloid" are purely relative; two or more substances present in a solution are more rapidly and completely separated the greater the difference of their diffusion velocity. Separation by dialysis is more rapid the more often the liquid in the outer vessel is removed.

THE CHURCH OF ST. BARTHOLOMEW THE GREAT.

THOSE who have received their education at the great School of St. Bartholomew will probably be familiar with this ancient and interesting edifice, founded by Rahere (who was also founder of the hospital) in the year 1123, and which has endured nobly until now. The *Builder* of May 8th contains an excellent description of the church and of the proposed restoration of this magnificent relic of the architecture of the period; and a letter which appeared in the same journal of May 15th shows very cogently that the project has a singular claim upon the sympathy of the medical profession. The lawyers of the Temple possess their fine memorial church of the past; Lincoln's-inn is also similarly endowed. Why should not medicine be represented in its specially appropriate church of St. Bartholomew the Great? Its restoration would probably be costly, and funds would be needed, but the medical world of to-day will have reason to be proud if they render aid in this work of respect to their pious friend and benefactor of times gone by, Rahere. In this connexion we may refer to a little work by Normanus, beautifully illustrated by Mr. G. J. Evans, and which contains a minute description of the fine old Priory Church and its precincts. It is published by Mr. Barnes, Fore-street, City.

HOSPITAL FOR DISEASES OF THE THROAT, GOLDEN SQUARE.

WE have received from the medical council of this hospital a statement made by them to the committee of management on certain differences that have lately arisen between these two bodies. In consequence of the action taken with regard to this statement by the lay committee, the medical staff, with the exception of one member, have sent in their resignations. From this *ex parte* statement it certainly appears that the lay committee have proceeded in an arbitrary manner in depriving the medical council of the voice they should have in the domestic medical affairs of the hospital. We shall probably have to recur to the matter.

COMPULSORY VACCINATION IN THE WORKHOUSE.

ON Saturday a woman made complaint to the magistrate at Hammersmith that her child had been vaccinated without her consent while an inmate of the Kensington Workhouse, and asked his opinion as to the legality of the action of the medical officer who had performed the operation. Mr. Bennett, in reply, stated that the mother's consent was unnecessary, as the vaccination had been done in compliance with an order of the Local Government Board. In an official circular of the year 1840, the Poor-law Commissioners expressed the opinion that the guardians have the right, without the permission of the parents, to vaccinate any child in their custody during any danger of contagion from small-pox; and the Poor-law Board again in 1848 pointed out that if the guardians and the workhouse medical officer think that any child in the workhouse requires vaccination, the medical officer should vaccinate such child, notwithstanding any objection on the part of the parents. The guardians are responsible for the safe custody and welfare of the child,

and are bound to take every precaution to prevent it from becoming the subject of infectious disease. This is only proper, and we should hope there are few persons who would raise any objection to the performance of an operation done so obviously in the interest of the child as well as in that of the general community.

DR. FOSTER'S AMENDMENTS TO THE BILL.

DR. FOSTER has put down on the paper several amendments intended to diminish the number of Crown representatives from six to four, and to give the difference to the profession—viz., to raise its representatives to four from two, an entirely inadequate number. We have advocated this change elsewhere, and before seeing Dr. Foster's amendments. Further, in any process of revision of the composition of the Council, Dr. Foster would provide that where any body ceases to be represented, in lieu of its representative one additional should be given to the practitioners in that division of the kingdom. The profession will be grateful to Dr. Foster for these amendments. We trust Sir Lyon Playfair will adopt them. Only in such ways can he justify to the profession a Bill leaving such numerous rival bodies, such an enlarged and costly Medical Council, and examining arrangements which will involve increased cost and complications to generations of medical men. Dr. Foster also wishes to pass an amendment to secure the registration of foreign degrees by those who, previously qualified, procured them after examination, and prior to the passing of the Bill. Subject to the approval of the Medical Council of the particular degree, we see no objection to this.

THE PHARMACEUTICAL SOCIETY OF GREAT BRITAIN.

THE festival of the Pharmaceutical Society is always one of the events of the season, and that of this week was no exception. The dinner, presided over by the President of the Society, M. Carteighe, Esq., was a great success, the company including representatives of all the scientific societies, from Professor G. G. Stokes, President of the Royal Society, downwards. Our own profession was strongly represented, and the mutually respectful feeling which has lately grown so much between medicine and pharmacy found happy expression in the speeches.

CIRCULATION OF BLOOD IN NERVOUS TISSUES.

THE large nervous ganglion cells are not extra-vascular; they do not lie in the meshes of a capillary network of bloodvessels. Each ganglion cell contains within its outer boundary a complete arterial and venous system; there is an intra-cellular vascular apparatus of most perfect description and arrangement. These are the conclusions of Adamkiewicz, already well known for his researches on the bloodvessels of the human spinal cord, and they may be studied in a thin volume under the title of "Der Blutkreislauf der Ganglionzelle" (Berlin, 1886, August Hirschwald). The nucleus we have for some time known is not a solid, but may be regarded as a cavernous organ; its caverns form a venous sinus which surrounds the nucleolus—so reports Adamkiewicz. From this central sinus a central vein leads the blood away and empties it into the vein of the neuroglia in its immediate vicinity. These assertions naturally strike one as extraordinary. The author in his preface cautions us not to be sceptical merely, but to search for ourselves or examine his own specimens. It is suggested that the nervous cells may have a direct influence on the circulation, aiding it or increasing its resistance, and that it may do this by the exercise of protoplasmic contractility or, we may presume, by more subtle processes. A description is given of the methods adopted in the ascertainment of the facts, the intra-cellular network of capillary vessels being demonstrated by injection of carmine and other fluids. Beautiful illustrations illuminate the text.

THE PASTEUR COMMISSION.

THE work of the Royal Commission appointed to inquire into Pasteur's method of inoculation for the prevention of hydrophobia consisted in the examination of groups of individuals who have been bitten by dogs, each group comprising all the cases that had been attacked by one dog An endeavour was made to ascertain the nature and site of the wound inflicted, together with all attendant circumstances; also inquiry was directed as to the nature of the illness from which the suspected dog was suffering, or whether it were really ill at all. One day Dr. Sanderson and Mr. Horsley investigated a group of cases that occurred at St. Ouen. On another day Sir Henry Roscoe, Dr. L. Brunton, and the above named went to Brie, near Paris, and made a thorough inquiry into another series of cases. On the third day all the above-named members of the Commission, together with M. Chauveau, spent the morning with M. Pasteur, witnessing his inoculations on patients, and the afternoon was devoted to an inspection of the method of inoculation of the rabbits, which M. Pasteur demonstrated. On the fourth day Drs. Sanderson and Lauder Brunton worked out another group of cases in Paris, and Mr. V. Horsley spent the day at Pasteur's laboratory. The secretary to the Commission, Mr. Horsley, remained nearly another fortnight in Paris, and was engaged in collecting evidence concerning many cases of bites by alleged mad dogs in and around Paris, at Lyons, and St. Etienne. Altogether eighty-five cases were investigated in this indefatigable manner.

THE BIRMINGHAM SCHOOL.

AT a meeting of the Clinical Board of the General and Queen's Hospitals, Birmingham, held on the 14th inst., Sir James Sawyer resigned the presidency, after three years of office, and Mr. Oliver Pemberton, F.R.C.S., senior surgeon to the General Hospital, was elected to the presidential chair. The Birmingham School has steadily increased and prospered of late years, and the results have been highly creditable to professors and students. Sir James Sawyer's tenure of office has proved advantageous to the school in many ways. The arrangements for clinical teaching have been largely developed, and since the amalgamation of the two hospitals for clinical purposes the students have necessarily possessed facilities for study unsurpassed by those of any provincial school. The following resolution, proposed by Mr. Pemberton and seconded by Dr. A. H. Carter, was carried unanimously:—"That the cordial thanks of the members of the Birmingham Clinical Board be given to Sir James Sawyer M.D., for the unvarying courtesy, ability, and punctuality evinced by him as President during the past three years."

LARYNGEAL CORTICAL CENTRE.

CLOSELY associated with the interpretation of internal speech, the laryngeal muscles are most probably represented in close proximity to the posterior part of the third frontal convolution, especially of the left side of the brain. Krause has experimentally deprived dogs of the capacity to bark by destroying a certain point of the antero-external part of the gyrus præfrontalis of that animal. M. Garel adds his quota to existing knowledge in the *Revue Mensuelle de Laryngologie*, No. 5. He believes that the cortical laryngeal centre ought to be placed in the third frontal gyrus at the level of the foot of this convolution, and near the furrow that separates it from the ascending frontal.

THE INFLUENCE OF WATER ON NUTRITION.

THE necessity of a certain quantity of water for the assimilation of food and the chemical changes of the body which result in nutrition is admitted by everyone, but whether the ingestion of water in large quantities has an influence for increasing or decreasing metabolism has been called in question. In France the question has been studied. In that country the subject of obesity has a significance which it does not possess on this side the Channel, and it had been thought that the ingestion of large quantities of water had an important effect in reducing this abnormal bulk by rendering the oxidations more active, thus favouring the burning away of the fat which had been deposited by reason of the sluggishness of the nutritive changes. That this idea is not true has been shown by Dr. Debove. He has proved that the ingestion of large quantities of water has no influence on nutrition or body weight if care be taken that the solid diet is in no way altered at the same time. The determination of the urea showed the same fact. The observations were made on a friend who submitted to a strict diet of known weight, so that after a time his body weight remained stationary; the amount of water was then increased to more than double, and the daily amounts of urea, with the body weight, were tabulated, which showed at a glance the fact that water has no influence on nutrition, and that persons taking it in unusual quantities have no tendency to become thinner or fatter unless the solid constituents of the diet are lessened.

THE COUNTESS OF DUFFERIN'S FUND.

THE fund established by the Countess of Dufferin for the purpose of supplying female medical aid to the women of India continues to receive vigorous support from representatives of all classes and creeds in all parts of the Indian Empire. At a meeting recently held in connexion with the Burmah branch at Rangoon, amongst the speakers were the bishop of the city, two Burmans, a Chinaman, a Bengalee, and a Parsee. The social condition of a race of people can only improve when its women's domestic life and education are good; and as a movement in this direction the work of the National Association, under whose auspices the fund is administered, is one of very great value. Of all the philanthropic movements started by Europeans in India, none has so thoroughly enlisted the sympathies of the native population. The scheme deserves the support of all charitable persons, and should not be allowed to languish.

STERILITY DUE TO UTERINE DISPLACEMENTS.

IN a recent lecture M. Pajot says: "Another cause of sterility in women has often been, and still is, turned to profitable account by the quacks, and, unfortunately, also by doctors who prefer their own interests to those of science. This cause is uterine displacement..... Two years before the war I received a visit from an Austrian lady, who had an extreme retroflexion, for which she had consulted nearly all the doctors in the world, and they all, except Scanzoni, had told her that under the circumstances pregnancy was impossible. She menstruated regularly and painlessly. I told her that if the menses could pass out other things could pass in, and that her displacement was not a hopeless obstacle to conception. A week after I saw her she became pregnant, and was subsequently confined naturally, after which I kept her in bed till her menses reappeared (three months), and succeeded in producing a perfectly straight uterus, of which I was very proud. A year later the displacement was as bad as ever, but that did not prevent her from having two or three more children. This fact puts those who, with much ado, try to replace the uterus by special instruments, quite in the wrong. This is all useless; the best replacer of the uterus is pregnancy. A displacement cannot be considered as a disease; it is an infirmity, and moreover an infirmity easy to be borne. It is said that it causes grave inconveniences to women. For my part, I declare that if women had not been told by the doctor or midwife of their condition they would never suspect it, so little does it annoy them! It is only in cases of considerable descent, which weighs heavily and drags, that a displacement is a real inconvenience."

THE CHOLERA IN ITALY.

The news from Italy shows that cholera maintains itself steadily in the city of Venice and at Bari. In the seven days ending May 18th there had been 28 deaths from cholera in Venice, but the number of attacks was set down at only 37, which must necessarily be below the mark. At Bari 79 cases and 32 deaths are reported to have taken place during the same period. In the province of Brindisi the attacks, which never exceeded some 5 a day, gradually fell to a single one on the 14th inst., and since then no fresh attacks have occurred. There has thus been no increase of cholera in Venice and Bari, and elsewhere the disease has abated. This is, so far, satisfactory. But in view of the early season of the year it would be very premature to attach too much importance to any apparent diminution in the extent of the epidemic. Last year cholera prevailed off and on for several months in the Spanish province of Valencia before the sudden outburst early in June, which formed the commencement of a widespread epidemic throughout the peninsula. The failure of the disease to make rapid headway in Italy, whether it is owing to meteorological or other conditions, is, however, favourable to the carrying out of such sanitary measures as are known to hinder the spread of cholera; and in such action the best hopes for Italy now lie.

M. LOUIS MELSENS.

La Presse Médicale Belge says that Belgium has to deplore the loss of one of her most illustrious sons. M. Louis Melsens, who has just died at the age of seventy-two, was a distinguished chemist, his name being known not only in Belgium, but in all countries where there are scientific workers. He had a rare independence of character, and was a lover of science, to the advancement of which he contributed numerous researches. His paper on the Employment of Iodide of Potassium in Mercurial and Lead Poisoning has been of great service to public health, and was awarded prizes by the Institute of France and the Belgian Government.

OVERWORK AMONG FIREMEN.

IT is scandalous, because wholly irrational and the direct result of a pitiful policy of "economy"—falsely so called,—that our firemen are practically on duty without any complete remission twenty-four hours daily. To expect men, however courageous and devoted, to do their duty honourably and efficiently under such conditions of life is to expect more than human nature will continuously yield. With some personal knowledge of the working of the Brigade, we are bound to express the deep conviction that no body of public servants renders more uniformly good service; but it is surprising this should be so! The remedy is simple enough. Raise the rate for fire-protection purposes from a halfpenny to a penny in the pound *by all means*, but at the same time emancipate the Brigade from the government of the Metropolitan Board of Works. If the Metropolitan Fire Brigade were an independent organisation directly responsible to the Secretary of State, as the metropolitan police force is constituted, Captain Shaw would be able to provide London with a far more

efficient organisation. Let some member of the House of Commons ask for an exact return of the percentage which the Metropolitan Board of Works practically charges for managing the Fire Brigade business, and, unless we are greatly mistaken, there will be a revelation which must tend to place matters in an entirely new light.

MORTALITY AMONGST MEDICAL MEN DURING THE TYPHUS EPIDEMIC IN MOSCOW.

THE typhus epidemic in Moscow, which is now, it seems, on the wane, has played great havoc in the ranks of the profession, no less than five junior police surgeons having already died. Most of them were without private means, and have left their families entirely without provision. Five more surgeons have been attacked by the disease, and it is hoped that they may recover. The authorities have publicly thanked the police surgeons for their devotion to their trying and dangerous duties during the epidemic. It is to be desired, however, that the widows and orphans will be remembered in some better and more substantial manner than this.

THE MEDICAL BILL AND FOREIGN GRADUATES.

A PETITION in favour of admitting to the Register foreign degrees obtained by practitioners already registered after *bonâ fide* examinations has, we understand, been forwarded by the Foreign Graduates' Association to Dr. Balthazar Foster, M.P. for Chester, for presentation to the House of Commons. Communications have also passed between the Association and Sir Lyon Playfair upon the same subject.

HUGE DOSES OF BISMUTH IN CHOLERA.

AT the Madrid Academy of Medicine Señor Sanchez, of the Military Sanitary Service, described his method of treating cholera, which consists in the main in giving huge doses of subnitrate of bismuth—150 grains every half-hour or hour—until the diarrhœa is arrested. The oil of mustard is also employed externally, and a very rigorous diet enforced, even bouillon being excluded.

THOSE of the profession who make their autumnal holiday in Switzerland may be interested in knowing that on Aug. 11th the Société Médicale de la Suisse holds its congress at Geneva. In the same month other associations—the Société Helvétique des Sciences Naturelles, the Association Géographique, and the Société Géologique Suisse—will also meet in that city within a few days of each other.

El Siglo Medico is publishing a translation of Mr. Godlee's clinical lectures on the Surgical Treatment of Empyema; and a series of articles on the same subject, embodying the results observed in the Odessa Military Hospital, is at the present time appearing in the *Vrach* from the pen of Dr. A. T. Kazanli.

THE Aberdeen University Club met and dined in great force on Wednesday evening. About 120 members and guests were present. The guests included General Sir Donald Stewart, G.C.B., Sir Peter Lumsden, K.C.B., Colonel Duncan, M.P., and others. The chair was occupied by the Right Hon. Lord Watson.

ON the 11th inst., the death occurred, very suddenly, of Dr. M. Willett of Bristol. The deceased, who was seventy-two years of age, was well known to, and highly popular amongst, the inhabitants of the city, in which he had practised for many years.

THE death is announced of Dr. Karl Friederich Küttner, who was formerly Prosector to the Obuchow Hospital in St. Petersburg, but who for the last thirteen years had lived in Heidelberg, where he died from heart disease. He was a diligent and painstaking observer, making good use of the enormous amount of pathological material which passed through his hands at the Obuchow Hospital. His published works are mostly to be found in Virchow's *Archiv*. Amongst the more recent of these may be mentioned his papers on Epithelium of the Lungs and on the Circulation in the Lungs of Frogs and Mammalia.

AT the Royston Board of Guardians on the 12th inst., an outbreak of a severe epidemic of measles in several parishes was reported, and it was stated that four deaths had already occurred in one village.

PROFESSOR GAIRDNER has been chosen by the Glasgow Committee as President elect of the meeting of the British Medical Association to be held in Glasgow in 1888.

WE regret to hear that Professor von Arlt, the renowned Vienna ophthalmologist, has met with an accident. He fell in the street and fractured his left humerus.

Pharmacology and Therapeutics.

A SOLUTION OF COD-LIVER OIL IN MALT.

THE value as a therapeutic agent of an emulsion of cod-liver oil and extract of malt has long been recognised, but there are undoubtedly many cases in which patients are quite unable to assimilate such a preparation. Pharmacologists and practical physicians have long desired to obtain a true solution of cod-liver oil in malt, but the difficulties in the way of its accomplishment were found to be so great that all attempts to manufacture such a product were temporarily abandoned. The question has, however, at last been solved, and we have had submitted to us specimens which are undoubtedly true solutions of oil in malt. On examining an ordinary emulsion of cod-liver oil with even a low power of the microscope, it is seen to be made up of myriads of oil-globules, some small, but the majority of considerable size. On subjecting the solution of cod-liver oil in malt to examination, no globules of any kind can be detected with even the highest powers available. This new preparation, which is known as the Kepler Solution of Cod-liver Oil in Malt, differs but little in appearance from the old-fashioned emulsion of cod-liver oil in malt, but its superiority as a therapeutic agent, especially in cases of wasting disease, is obvious. Thanks to the spread of a knowledge of pharmacognosy, the time is fast coming when every medical man will systematically examine the drugs he prescribes, and will not be satisfied with mere random assertions as to their purity and value.

HYDRASTIN.

Dr. A. T. Slavatinski, who has published as a graduation dissertation an account of his researches on the pharmacological action of hydrastin, which he gave to a number of pregnant bitches and rabbits, as well as to other animals, finds that when introduced into the blood in doses of not less than a hundred-thousandth of the body weight, or one centigramme per kilogramme of the body weight, it acts as a stimulant to the spinal cord and medulla oblongata. In medium doses it paralyses the vaso-motor centres, thus decreasing the blood-pressure. It acts on the heart first as a stimulant, and afterwards as a depressant of the motor ganglia. No effect seems to be produced on the peripheral branches of the pneumogastric. The augmentation of the cardiac contractions begins from the spinal cord. At first

the secretory and convulsive centres are stimulated and afterwards paralysed. Hydrastin, in doses of from 0·01 to 0·03 grm. per kilogramme of body weight, was found to act as an ecbolic in pregnancy, and to produce contraction in the fibres of the non-pregnant uterus. At a certain period of pregnancy, which for the human subject is about seven months, the drug, in the same small doses (0·01 to 0·03 per kilogramme), if repeated a few times, appears to cause a miscarriage. The author had an opportunity of trying the ecbolic effect of hydrastin on a woman who had a contracted pelvis, and in whom it was desirable to bring on the labour somewhat before its proper time. On March 3rd, which was the commencement of the ninth month of pregnancy, a gramme dose of hydrochlorate of hydrastin was administered hypodermically morning and evening. These injections were repeated the following day. In the evening the patient noticed that the movements of the fœtus were particularly strong. On the forenoon of March 5th a gramme and a half was injected, and subsequently two strong movements were felt. The same evening two grammes were injected. On the forenoon of the 6th two grammes were given, and there followed during the day three strong movements. At night three grammes were injected. On the forenoon of the 7th three grammes were given, and one very violent and prolonged movement was experienced. Two grammes were given in the evening. No further injections were required, as signs of approaching labour manifested themselves. The child was born without complications, but it died the next day. Dr. Slavatinski suggests that if further experiments show that hydrastin may be used without danger to the mother, it may well replace the use of instruments in cases where premature induction of labour is required. He considers that hydrastin and its salts are more reliable than other preparations of the root. With regard to the dose for therapeutic purposes, he puts the maximum daily quantity at 0·3 grm. when given hypodermically, but would give doses of 0·5 grm. internally.

GRINDELIA ROBUSTA.

Grindelia robusta, which has been for some time in use in the form of the fluid extract, has recently been made the subject of a series of further elaborate investigations, both in the physiological laboratory and the hospital, by Dr. Dobroklonski, chief of Professor Botkin's clinic in St. Petersburg. (See THE LANCET of July 11th, 1885.) He made experiments on frogs, rabbits, and dogs to the number of sixty-eight, and gave the drug to patients suffering from various diseases. He found that the main effect, when moderate quantities were used, was to diminish the number of the heart beats, increasing at the same time the arterial tension. The effect on the heart appears to be due in warm-blooded animals to a stimulating action exercised on the inhibitory nervous apparatus of the heart, more particularly on that which is situated in the medulla oblongata. The increase of tension arises partly from a direct action of the drug, causing the vessels to contract, and partly from its stimulating action on the vaso-motor centres situated in the brain, the medulla, and the cord. Grindelia robusta also diminishes the irritability of the vaso-motor nerves of the heart and vessels, as well as that of the motor nerves and voluntary muscles, the nerves being more easily affected than the muscles, and the central more easily than the peripheral nerves. The therapeutic action of the drug, of which the author is in the habit of administering thirty drops three or four times daily, is, he believes, due to its power of decreasing and rendering more regular the cardiac contractions—having, he says, a greater regulating effect than digitalis, adonis vernalis, convallaria majalis, or chloral hydrate. It has, too, a diuretic action, but this is of less importance, being weaker than that of digitalis or adonis vernalis. He finds that grindelia robusta may advantageously be combined with adonis vernalis in cardiac diseases, which other more ordinarily used remedies have failed to relieve.

FLUORIDES OF AMMONIA AND IRON.

Dr. John Lucas of Bombay has employed the fluoride of ammonia in the treatment of hypertrophy of the spleen. The drug appears to have antipyretic and antiperiodic properties, as proved in cases of ague. Nausea was produced at first, but afterwards large doses could be borne. The appetite, after a time, improves under its use. By giving the drug after meals its nauseant and purgative actions are greatly lessened. "It certainly appears to possess the merit of excelling any other method of treatment of hypertrophied spleen with which we are acquainted." Dr. Lucas began with five-minim doses, but in future would be disposed to give twenty, or even thirty, minims well diluted. The fluoride of iron would, perhaps, be preferable to the ammonia salt, on account of its hæmatinic properties.

SUBCUTANEOUS INJECTIONS OF COCAINE IN ASTHMA.

Subcutaneous injections of a 5 per cent. solution of salicylate of cocaine are said by Mosler to arrest the paroxysms of asthma, and he believes that this remedy will prove useful in the general treatment of the affection. He gives 0·04 gramme (three-fifths of a grain) for a dose. In one case he remarked a certain amount of faintness, which, however, soon passed off. A Dresden physician, Dr. Beschorner, has also recorded favourable results from the use of cocaine in asthma.

LUNATIC ASYLUMS, 1885.

No. I.

EACH return of spring brings for us, with the primrose and the Lenten lily, its crop of annual blossoms in the form of reports, clad in every conceivable hue, from the various lunatic asylums of the country. These reports, not unlike the modest flower, tell us how much of homeliness and peace may be found in out-of-the-way places, and in places, too, sometimes so wild and darksome that they might seem almost to bid defiance to us in our most sanguine hopes. In themselves, however, these reports deal not with the poetry, but with the saddest and sternest realities, of our social and domestic life; they sum up, in general language and with an almost wearisome monotony of statistics, the annual events and transactions of our little worlds of unreason.

Taking the reports for the year 1885 now before us, it is our purpose, in the first place, to glance briefly at them one after the other, and to note what matters of special interest each one presents; and, in the second place, to give a general summary of the year's work in relation to the reports as a whole. With this view, we shall take it as a favour if the medical superintendents who have not sent to us a copy of their reports will kindly do so at their early convenience.

At the Cumberland and Westmoreland Asylum, the Superintendent (Dr. Campbell) says that the diminished admission-rate for the past year "fully bears out his formerly expressed views, that in this district extreme prosperity and high wages among the lower strata are a more powerful factor in causing insanity than the opposite extreme." Further, he bemoans and deprecates, on behalf of the private patients, the "mistaken kindness" of their relatives in pursuing the home treatment too long and delaying their admission into the asylum, so that "they do not at all have the same chance of recovery as their poorer fellow-sufferers." On the other hand, and on behalf of the ratepayers, Dr. Campbell calls attention to a matter of some importance—viz., the frequent readmission of persons suffering from insanity due to alcoholic excess. We take it that these persons are to be found at all stages of a scarcely varying chronological cycle, involving (1) drunken idleness ending in insanity; (2) admission to asylum; (3) speedy recovery; (4) early discharge from asylum; (5) rapid relapse. They would stand a much better chance (he says) of exemption from this self-brought-on insanity if after recovery in the asylum they were by law detained for an increasing period after each attack in some industrial institution, whose profits assisted to reduce the rates. We think the Prison Commissioners would have little difficulty in providing a few cells in their local habitations (on a modified penal scale, of course) for such "drowthy" and expensive misdemeanants.

There is a pleasing homeliness about the report of the Superintendent of the Dorset Asylum; and we regret that this experienced official should have to refer to himself as being in indifferent health. The Commissioners in Lunacy, however, in their report upon the asylum, call attention to the staff of attendants as being too weak; and this is not to be wondered at when we find 89 patients (of whom 11 are epileptics and 11 are in bed) under the care of four nurses and a supernumerary. We scarcely know whether the

nurses or the patients are most to be commiserated. Again, no wonder that Mr. Symes tells the Commissioners that he experiences great difficulty in getting nurses when the initial wages are £13, without uniform. The tone of a large asylum must always suffer when the authority and the element of self-respect which a quietly attractive uniform carries with it are lacking.

The report of the Devon Asylum, which, by the way, is to be commended for its excellent type and paper, is illustrated with most useful charts, which show at a glance the fluctuations in the annual population, death-rate, recoveries, and weekly cost *per caput*. Dr. Saunders still has his wards so overcrowded as to prevent him classifying his patients according to their mental requirements. Nevertheless, he has to report favourably as to the health of the community, and he says that the low rate of mortality (the percentage on the average number resident being 4·32; 3·21 on the males and 5·07 on the females) is remarkable, and without parallel in the history of the asylum. Dr. Saunders, also, has occasion to refer to a class of cases which merit the attention of the Prison Commissioners. "It is interesting to note how one or two patients of the 'rogue and vagabond' class were sent here and not found insane. They have sufficient craft and cunning, as they avow, to prefer the asylum to the gaol, and are usually persons who have no claims on the county, but are only casuals. From a review of past years it would appear that this class of patient is oftener met with than formerly. Malingering among our own insane poor is almost unknown." This statement is interesting not only with regard to the overcrowding of our asylums, but also with regard to the diminished numbers of our prison population.

The Superintendent of the Newcastle-upon-Tyne Asylum (Mr. Wickham) gives the following opinion on the relation between intemperance and insanity:—"It will probably be always a vexed question whether the intemperate habits are the cause of the insanity, or the insanity is the cause of the intemperate habits. As the result of many years' careful study of the causes of insanity, I can only remark that in the great majority of those particular cases which have come under my notice, the evidence is in favour of the conclusion that the insanity causes the intemperate habits. The reverse only happens when there is already some disease which is due to impaired nutrition. Perhaps it is for that reason that the descendants of a drunkard are more liable to insanity than the drunkard himself."

A good practical report of the working of a large institution is sent in by Mr. Barton, the Superintendent of the Surrey County Asylum at Brookwood. He is able to report a large percentage of recoveries on the number of admissions; and although the death-rate was somewhat higher than for the previous six years, it appears to have been due to the great number of feeble and broken-down cases admitted during the last two years. A commendable pathological zeal is observable at this asylum, for, with two exceptions, post-mortem examinations were made in all the 103 deaths that took place during the year. A criminal lunatic in an advanced stage of general paralysis was admitted. He had been sentenced to a month's hard labour for unlawful possession of a quantity of wood; and Mr. Barton says there is no doubt this man was not responsible for the act for which he was convicted, and which was simply the result of his disease. There is every reason to fear that this consignment of the insane to prison cells is of too frequent occurrence.

There is nothing special in the reports of the Superintendents of the Birmingham Borough Asylums, but the Lunacy Commissioners, in their report on the Winson-green Asylum, make the following remark:—"We saw in the hall at dinner 311 men and 221 women, who were seated, not, as is general in asylums, on different sides of the hall, but only on different sides of the tables. This arrangement seems here to be attended with very happy results, and the patients behaved with the greatest propriety."

The Superintendent of the East Riding Asylum at Beverley refers to the fact that the insanity of three only out of sixty-two admissions during the year was due to intemperance. He fears that this small proportion of cases due to intemperance is "but a sign of hard times." "One patient, an idiot, died of premature decay at the age of twenty-two. His development had been arrested in early life. He could neither see, hear, nor speak; he could not even stand; his existence was a mere fact, and not equal to that of a healthy plant."

BURGH POLICE AND HEALTH (SCOTLAND) BILL.

THE Burgh Police and Health Bill for Scotland, one of the measures introduced last year into Parliament, but abandoned at the end of the session, has passed the House of Lords and now awaits the consideration of the Commons. In addition to the regulations necessary for the constitution of police burghs and the formation and maintenance of a police force, there is much in the Bill bearing upon the sanitary condition of the towns and of the houses, and also an important section on the mitigation and prevention of disease. To some of the proposed clauses we think it necessary to draw the attention of the profession. The 66th clause enacts that the commissioners appointed for the purposes of the Act, elected by ballot by the householders of the burgh, and one-third of whom retire annually, "shall appoint annually a legally qualified medical practitioner, who shall be styled the 'medical officer of health,' and whose duty it shall be to ascertain the existence of disease within the limits appointed to him, especially of all infectious diseases, and to point out any local causes likely to occasion or continue such diseases or otherwise injure the health of the inhabitants," &c. The tenure of office of the medical officer of health for one year only, or the necessity of his reappointment annually by a fluctuating body of commissioners, appears to be very objectionable, as likely to interfere with his independent action—in such cases, for instance, as those in which some of the more influential commissioners may be the owners of property which, from its insanitary condition, should be reported as injurious to the health of the occupants. The interests alike of the public and of the profession seem to us to require that the appointment should be permanent, subject only to being cancelled for inefficiency or neglect on the part of the holder, such dismissal to require the approval of the Board of Supervision. Under Clause 325, with a view to secure the notification of cases of infectious disease, it is provided that "every medical practitioner resident or practising within the burgh shall, within twenty-four hours of the same coming to his knowledge, report to the medical officer of health every case of infectious disease and whooping-cough occurring in his practice, and stating the building or ship where the patient is being treated, under a penalty of forty shillings; and if it be found that the diagnosis of such practitioner was correct such practitioner shall be paid the sum of two shillings and sixpence for each case reported and verified as aforesaid." It is not said by whom this verification is to be made, but we presume it is by the medical officer of health. To this we see very serious objection, especially in those instances in which he is also a practitioner in the borough. It cannot fail to give rise on some occasions to very unpleasant feelings, and it seems quite unnecessary. The certificate of a duly qualified practitioner ought to be accepted as sufficient evidence of the nature of the case. When no medical practitioner has been called in, the occupier or person in charge of the building is to give notice to the medical officer of health of any case of infectious disease of the existence of which he shall become aware; but no remuneration is provided for so doing, nor is there any penalty for neglecting to report it. The commissioners are bound to intimate any outbreak of infectious disease within the burgh to the Board of Supervision, who must notify it to contiguous local authorities under the Public Health Acts. Under the term "infectious disease" are comprehended "cholera, smallpox, typhus, typhoid, scarlet, relapsing, continued, and puerperal fever, measles, scarlatina, and diphtheria, and such other disease as the commissioners, with the approval of the Board of Supervision, or Her Majesty by Order in Council, may, from time to time declare, for the purposes of this Act, to be infectious." Why scarlet fever and scarlatina should be classed separately, and why whooping-cough should be excluded from the list of infectious diseases, are mysteries known only to the Parliamentary draughtsman.

The commissioners are to provide in or near the burgh a hospital for the treatment of infectious diseases, which must be licensed by the magistrates before being occupied, on the certificate of the medical officer of health or some other duly qualified medical practitioner that it is suitable for such purpose, the licence to be renewed annually; also a reception-house for persons removed from an infected house, but who are not suffering from disease themselves'

and a disinfecting-house with necessary apparatus; and they may provide nurses for attendance upon infectious cases. The medical officer of health is to have power, in cases where from insufficient accommodation he has reason to fear the spread of infectious disease, to remove the patient to hospital, the expense incurred to be defrayed out of the burgh general assessment. The commissioners are to be empowered to remove to the reception-house for a period not exceeding fourteen days all the residents of an infected house, on the production of a certificate signed by the medical officer that such removal is necessary to avoid the spread of disease, and to prevent the return of any of the residents until the house and all the bed and body clothing have been cleansed and disinfected to the satisfaction of the medical officer. If the commissioners are of opinion "on the certificate of their medical officer of health, or of any other legally qualified practitioner," that this cleansing and disinfection would be more effectually carried out by their own staff than by the owner or occupier of the house, they may cause it to be done, but at their own cost, and making compensation for any property or articles destroyed or injured. A penalty not exceeding forty shillings is to be inflicted on any person getting rid of the excreta of patients suffering from infectious disease, or of any article likely to communicate it or to retain infection, without previously disinfecting them. Mortuaries and proper carriages for the removal of the bodies to them are to be provided, and a heavy penalty is to be inflicted on anyone retaining unburied for longer than forty-eight hours, except in a mortuary, or with the sanction in writing of the medical officer of health or of a registered medical practitioner, the body of any person who has died of infectious disease. Wakes are likewise forbidden in such cases. The Bill also provides for the prevention of children who have suffered from infectious disease, or are resident in a house where such exists, attending school until free from disease and infection and the house and its contents have been disinfected to the satisfaction of the medical officer of health. Occupiers of milk-shops and dairies are to give notice of any persons employed in them being attacked with infectious diseases. When there is reason to believe that the spread of such disease is attributable to milk, the commissioners are to have power to require the cowkeeper, purveyor, or occupier of a dairy or milk-shop to furnish lists of the customers supplied by them, which will afford most important means of tracing its influence, and verifying or removing the suspicion. On the certificate of the medical officer of health that, in his opinion, an infectious disease is being spread by the sale or delivery of milk from any dairy or farm, the Procurator Fiscal or sanitary inspector "shall apply to the magistrate for an order to prohibit the sale of the milk so brought, from and after due intimation of such order, until the person affected has been removed or has recovered from such illness, the premises been disinfected, and the bedding and clothing have been destroyed or thoroughly disinfected, and until it is certified by the medical officer of health that the said premises are free from infection and in a proper sanitary condition, and that the sale of milk from such place may be resumed."

THE LATE SURGEON-MAJOR T. R. LEWIS, M.B.,

ASSISTANT PROFESSOR OF PATHOLOGY, NETLEY.

THE premature death of Surgeon-Major Timothy R. Lewis, M.B., is a loss not circumscribed within the limits of the department to which he belonged, for it is a severe loss to the profession and the cause of science generally. There is something peculiarly pathetic in his death at a time when he had been elected for the blue ribbon of science, but did not live to have the honour of the F.R.S. actually conferred upon him. There is very little doubt, too, that his death was attributable to his scientific ardour, for his attack of fatal pneumonia seems to have developed out of some septic poisoning following a dissection wound.

The deceased possessed a rare combination of qualities: keen love of work, patient industry, penetration, a strong and impartial judgment, a well-trained eye and hand, linguistic knowledge, and a very modest and amiable character. His ability and aptitude for scientific inquiries early attracted attention at Netley, and, in connexion with Dr. D. D. Cunningham, he was selected, at the suggestion of the late Professor Parkes, to conduct a special scientific investigation into the theory of the fungoid origin of cholera advanced more particularly by Professor Hallier of Jena, and that of the connexion existing between this disease and certain conditions of soil promulgated by Professor M. von. Pettenkofer of Munich. After a special course of study in Europe, Cunningham and Lewis went to India, and published, in connexion with the sanitary department of that country, a series of very exhaustive observations on these subjects—microscopical, chemical, experimental, and otherwise. Lewis did a great deal of work with the Sanitary Commissioner of the Government of India (Surgeon-General Cuningham), largely aiding that official in the preparation of his reports, and contributing also from time to time special papers to those reports, either by himself or in connexion with his colleague, Dr. D. D. Cunningham.

To complete what we have to say of Lewis's labours in relation to cholera brings us down to the present time, and to investigations still incomplete. As is well known, a German Commission, under the distinguished *savant*, Dr. Robt. Koch, was sent to Egypt to study the subject of cholera during the late epidemic in that country; and subsequently the Commission proceeded to India to complete the series of observations necessary for establishing the identity of the disease in Egypt with Indian cholera. It is not necessary to discuss in detail the results of those investigations; the outcome of them was, in the opinion of the Commission and others, to establish that the so-called comma-shaped bacillus was invariably present in, and the cause of, cholera. Lewis, who by this time had left India, and was Assistant Professor of Pathology, Army Medical School, Netley, with the zeal that characterised him, started off to Marseilles and Toulon, to corroborate for himself this alleged discovery. In September, 1884, he published a memorandum on the subject, in which he demonstrated that a comma bacillus microscopically identical with Koch's was present in the saliva, and he criticised with great penetration the views advanced by the German micro-pathologist. The Indian Government subsequently sent out a Commission to India (that of Drs. E. Klein and Heneage Gibbes), and their report was submitted for the decision of a committee convened in 1885 by the Secretary of State for India under the presidency of Sir Wm. Jenner, of which committee Lewis was appointed honorary secretary. Lewis contributed to their report the results of some very valuable and original observations in further pursuit of a subject, the investigation of which he was probably better qualified to undertake than anyone living. The latest report—21st Annual Report of the Sanitary Commissioner of the Government of India, published in 1886—corroborates the correctness of Lewis's views; and, as matters at present stand, Koch's alleged discovery is at present not proven.

At the late Sanitary Conference at Rome Lewis was one of the delegates, and did excellent service to the cause of science and scientific sanitary legislation. But it was in his parasitological researches in endemic hæmaturia and chyluria in the discovery of the filaria sanguinis hominis that Lewis performed his more brilliant and original work. The subject is one of great importance, and in its latest advances in relation to the life history of filaria, the mosquito its intermediate host, and the periodicity of the phenomena, it forms a study of extreme interest in micro-pathology and natural history. Lewis made the discovery of the filaria in the urine of patients in the General Hospital, Calcutta, in 1869. In 1871 the same filaria was discovered by him in the blood, and several specimens were forwarded to the late Professor Parkes in this country. The blood is infested with a living worm about $\frac{1}{3}$th of an inch in length and $\frac{1}{75}$th of an inch in diameter. Upon the subsequent researches of Dr. Manson in China and Dr. Bancroft in Australia there is no need to dwell. The whole question is discussed in the new volume (vol. ii.) of Hirsch's Handbook of Geographical and Historical Pathology, published by the New Sydenham Society. It is not, we think, very creditable to the Government of this country or that of India that Lewis received no State recognition of his important services. Science counts for very little compared with the glamour of the profession of arms.

ON the 16th inst. the Hospital Sunday collections were made at Birkenhead.

THE UNIVERSITY OF LONDON.

Scheme embodying the Resolutions of the Special Committee for the consideration of the Scheme for the Constitution of the University.

SECTION 1. *University.*—The University to consist of: (*a*) Senate; (*b*) Convocation; (*c*) Constituent Colleges; (*d*) Council of Education [in place of Faculties and Boards of Studies].

SECTION 2. *Senate.*—The Senate to consist of: (*a*) Chancellor to be appointed by the Crown. (*b*) Vice-Chancellor to be elected by the Senate annually from amongst its members. (*c*) The following members *ex-officio:* chairman of Convocation, chairman of Council of Education,* and chairman of each of the four Boards of Studies.* (*d*) Ordinary members to be appointed as follows: Six by the Crown, eight by Convocation [instead of six], four by the Council of Education,* and one by each of the seven following institutions—University College, King's College, Royal Society [additional], Royal College of Physicians of London, Royal College of Surgeons of England, Council of Legal Education, and Council of Incorporated Law Society. The ordinary members to hold office for a period of four years, and to be re-eligible. The Senators elected by Convocation to be elected by members of Convocation voting in their respective Faculties. Two members to be elected by the members of each of the four Faculties. The Senate to have the control and management of the University.

SECTION 3. *Convocation.*—Convocation to remain constituted as at present, with such increased powers as are herein referred to.

SECTION 4. *Constituent Colleges.*—The constituent colleges to consist of educational bodies in or near London, together with other institutions or colleges not affiliated as constituent colleges to any other University, and having one or more Faculties of university rank; and to be (*a*) such bodies as may be named in a schedule to be settled by a joint committee of the Senate and Convocation; (*b*) such other bodies as may be hereafter admitted by the Senate with the concurrence of a joint committee of Convocation and the Council of Education. On the admission of each constituent college, it shall be determined to what Faculty or Faculties it shall belong, and in what mode it shall be represented on the Council of Education, and such terms may be subsequently revised by the Senate, with the concurrence of a joint committee of Convocation and the Council of Education. The Senate to have power, with the like concurrence, for good cause to remove any college from being a constituent college. The institutions from which the University receives certificates for degrees in Medicine to retain their right of giving such certificates, whether they be constituent colleges or not; the list of such institutions to be subject to the existing power of revision; but the Senate not to report thereon without the like concurrence.

SECTION 5. *Council of Education.*—The Council of Education to consist of: (*a*) representatives of Convocation; (*b*) representatives of the constituent colleges; (*c*) the examiners of the University. The representatives of Convocation to be members of Convocation, and to be elected by the members of Convocation voting in their respective Faculties. Convocation to elect one-fourth of the total number of the members of Council. The representatives of constituent colleges to be professors or persons engaged in giving instruction of university rank. The representatives of Convocation on the Council of Education to hold office for a period of four years, and to be re-eligible. The Council of Education to advise the Senate on all matters connected with the subjects of examination and the teaching thereof. The Council of Education to appoint a chairman annually. The Council of Education to appoint from among its members standing committees or Boards of Studies, one in each of the four Faculties, and also to have power to appoint special committees as it sees fit. Each board to appoint a chairman annually. Each Board of Studies to consider matters connected with its own Faculty and to report theron to the Council of Education.

SECTION 6. *Provisions for Promotion of Higher Education.*—The University to have power to hold real property and to accept gifts, devises, and legacies for the purposes of the University. The Senate to take steps to secure to the University a fixed endowment from the State in lieu of the present annual grant, with power of exclusive control over its application and expenditure. The Senate to have power to appoint professors, lecturers, and examiners in any branch of knowledge; to subsidise or endow laboratories, libraries, and museums; to make grants out of the funds of the University for the purpose of research; and to assist by any other means in promoting higher education. The Senate to have power to confer honorary degrees.

SECTION 7. *Supplementary Provisions.*—The existing members of the Senate to continue. The Crown not to appoint any new members until the number of the present Crown nominees is reduced to five, and then to nominate from time to time to vacancies occurring in any of its six places. Convocation at once to elect one moiety of its complement of members to the Senate and to the Council of Education respectively, and at the end of two years to elect the other moiety, and each Faculty to fill up from time to time vacancies occurring in the number of its representatives. The Council of Education, when constituted, to elect its complement of members to the Senate, two of whom, to be determined by ballot, shall retire at the end of two years; and the Council of Education to fill up from time to time vacancies occurring in the number of its representatives. All elections by Convocation under this scheme to be by voting papers.

* Instead of three by each of the four Faculties.

EXTRAORDINARY CÆSAREAN OPERATION.

OUR recent annotation under this heading (THE LANCET, May 8th, p. 890) was based on such an exceptional series of facts, that with the fullest confidence in the authority from which we quoted—*La Gazzetta degli Ospitali*,—we sought fuller information from the patient's medical attendants, Drs. Raniero Baliva and Adolfo. Serpieri. Those gentlemen have our warm thanks for their courteously prompt and full reply, which we translate:—

"Viterbo, 15th May, 1886.

"We append a summary history of the Cæsarean section which N—— de A—— of Viterbo practised upon herself on the morning of the 28th March last.

"A peasant woman of Viterbo, aged twenty-three, of lymphatic temperature short stature (one metre and forty cent.), and of delicate constitution, was in the last month of pregnancy. As her condition was talked about amongst her neighbours, and provoked the anger of members of her family and of her masters, she came to the following unheard-of determination. At 3 A.M. on the 28th of March, as she relates, with a not very sharp kitchen knife she opened her abdomen. The wound was linear, but somewhat jagged (*sfrangiata*), twelve centimetres in length, situated in the middle of the right iliac region, from a little above the level of the umbilicus downwards, and from without inwards. She penetrated with a somewhat less extensive incision into the uterus, and extracted from it a male fœtus at the ninth month, weighing 1 kilogramme and 900 grammes. This fœtus, before being extracted from the uterus, had received several important wounds in the thorax and abdomen, whereof it died before breathing, as was undoubtedly proved by the results of the necroscopic analysis. The head had been divided from the trunk by a circular incision at the base of the neck and precisely between the penultimate and the last cervical vertebra. The cord was detached from the placenta and the fœtus. The placenta was perfectly healthy. This operation completed, the patient states that she tightly bound a bandage round her body, so as to bring the edges of the wound together and prevent the protrusion of the intestinal coils; then, having dressed herself at 5 A.M., two hours after the operation, she went into Viterbo on foot, a distance of one kilometre, and visited a married sister, to whom she said nothing of what had happened, but breakfasted with her on bread and coffee and a cup of broth. She then left the house and walked about the town for some time, in order, as she states, to show herself and to put an end to the current talk about her pregnancy. At 10 o'clock, still on

foot, she returned to her home in the country; on reaching it she was seized with unbearable abdominal pains, followed by violent vomiting and fainting. She quickly rallied, and, the bandage having slipped upwards, almost the whole of the small intestines protruded. It was only then (about 11 o'clock) that the father, mother, and brother became aware of the serious occurrence, and went to Viterbo for medical assistance.

"We were the first to arrive on the spot at 4 P.M., the same day, thirteen hours after the incision, and six hours after the escape of the intestines. We found the patient in pain, but not so much so as might have been anticipated from the gravity of the case; she was conscious and tolerably calm. She was lying dressed on a small bed in a well-ventilated room. Without loss of time, with all possible precautions, and with the limited means at our disposal in the country, we proceeded to cleanse the intestines and to replace them in the abdominal cavity, after having emptied it of copious sero-sanguineous effusion. We were scrupulously careful to secure the utmost possible cleanliness; the wound was closed with twisted sutures, and a drainage-tube placed in its most dependent part. Strict injunctions for necessary care were given to the patient and her attendant. During the first five days no serious change occurred. The thermometer never rose beyond 39·5° C. There was no sign of uterine disturbance; the peritonitis was only partial; thirst slight; vomiting at night. During the first three days micturition was difficult and the bowels inactive. The catheter was only passed once, on the third day, from which period the bowels acted copiously and regularly. The patient slept for several hours on the previous night; her sufferings were not great, and on the eighth day her recovery seemed assured. At the commencement abundant bloody serum and badly-smelling clots escaped from the turgid and painful abdomen. A considerable quantity of omentum protruded. Pus followed, thin at first, but became thick on the tenth day, and then gradually decreased in quantity. The discharge all took place through the lower angle of the wound, the deep parts of which healed by first intention for about two-thirds of its extent. On the twenty-fifth day the wound was purely superficial, and limited to six centimetres in length. Cicatrisation was complete on the fortieth day. The patient is now (forty-eighth day) perfectly well and walks about. She is under the surveillance of the judicial authority and is receiving much sympathy from the public.

"The occurrence, though seemingly incredible, is perfectly true. We have related the actual facts, accepting the patient's statement that she operated upon herself. What is even more extraordinary than the operation is recovery in the proved circumstances of the actual case. We shall be happy to supply any further information desired.

"RANIERO BALIVA, M.D.
ADOLFO SERPIERI, M.D.

"P.S. Externally we made use of a solution of carbolic acid 4 per cent., and of 1 per cent. for injection through the drainage-tube, which was removed the tenth day as it appeared to irritate. The sutures were removed the fourteenth day. During the first fifteen days the dressings were changed four times daily. At first abstinence from food was strict; after a few days good wine was allowed. Throughout the treatment preparations of quinine were administered. Only two oil purgatives were given in the early days. Ice was freely used during the first five days to counteract hiccough and vomiting. Until recovery was complete the woman was covered with carbolised cotton wool."

UNIVERSITY COLLEGE HOSPITAL.—The Executive Committee have arranged for a fancy dress ball to be held at Willis's Rooms, King-street, St. James's, on Tuesday, June 1st, 1886, in aid of the funds of the above hospital. The bazaar, to be held in the grounds of University College, will be opened by the Princess Louise on July 2nd—not the 9th, as stated in our last.

THE NEW MEDICAL BILL: SUGGESTIONS.

"M.D." suggests: 1. After —— no one shall be allowed to practise medicine or surgery in the United Kingdom without first obtaining a Government permit and a title from one of the present recognised licensing bodies under a penalty of —— &c. 2. The Government permit to be granted (*a*) after a conjoint examination in medicine and surgery under conditions as approved of by the Medical Council, at a fee of ——; (*b*) on application, free of charge, to all whose names appear on the Medical Register, or who possessed registerable qualifications at the date of the Bill becoming law. The Government permit would ensure that all candidates passed the same standard of examination, and, a title being required as a licence to practise, the present licensing bodies would not be interfered with—a rock on which all proposed Medical Bills have come to grief.

With reference to health diplomas, the Association of Medical Practitioners qualified in Sanitary Science suggest the following clause: "All registered medical practitioners who have obtained from any university or medical corporation of the United Kingdom a qualification in Public Health after examination shall be permitted, and are hereby empowered, to register the same as a qualification under the Medical Act on payment of such fee as the Council may appoint." We understand that Sir H. Holland has consented to move the above clause as an amendment in committee.

With regard to foreign degrees, "A Medical Man with British Diplomas" thinks it is a great mistake, in face of the increased number of medical men who are yearly admitted on the Register, to propose that foreign diplomas shall be registered, especially considering how easily these foreign diplomas are obtained. He thinks that in the background there must be some motive for legalising these diplomas, as it cannot be for the good of the profession.

Public Health and Poor Law.

LOCAL GOVERNMENT DEPARTMENT.

REPORTS OF INSPECTORS OF THE MEDICAL DEPARTMENT OF THE LOCAL GOVERNMENT BOARD.

On Diphtheria at the Royal Female Orphan Asylum, by Dr. GRESSWELL.—The fact of a prevalence of diphtheria in this institution having occurred in November last, with its reappearance in January, and the circumstance that the cause had "baffled all inquiries," led to the investigation which Dr. Gresswell made on behalf of the Local Government Board. The institution contains, with its resident staff and the orphan girls, 151 persons; and it is located on a piece of low-lying ground completely encircled by the river Wandle, or by a conduit, partly covered and partly open, which connected together a semicircular sweep of the river. The site itself is thus unpromising. Then, again, for many years past cesspool drainage had been resorted to, and when this was abandoned, after an epidemic of enteric fever, an ill-devised sewer, which can only now be described as constituting an elongated cesspool, took its place; some of the old house drains and soil-pipes being so left or disposed of that little else is known of them than that foul odours tend to prevail, and that in connexion with some of these nuisances one old soil-pipe was discovered and removed. Such conditions, superadded to the character of the site, become most unfavourable when associated with diphtheria. Then, again, the building forming the asylum is so constructed that the infirmary, wards, bedrooms, &c., all have one common air, and hence no proper isolation, in the sense of aerial severance of sick from healthy, can be expected. Under these circumstances, Dr. Gresswell looked into the previous sanitary history of the inmates, and he records a long list of ailments since 1867, which include sore-throats, diphtheria, diarrhœa, ophthalmia, erysipelas, gastric fever and irritations, enteric fever, &c., which go to show that for a very long period diphtheria in its more or less marked forms, and many other diseases which are known to be associated with conditions leading to the pollution of the air, have prevailed in the institution.

So also Dr. Gresswell, dealing essentially with the throat mischief, which he especially inquired into, finds in the meagre sickness returns of the establishment a large number of entries of sore-throat, putrid throat, strumous throat, and the like, together with ailments suggestive of diphtheritic sequelæ; and on examining the throats of the orphan girls, he says that "hardly more than one-third can be spoken of as possessed of healthy tonsils." The remainder "have tonsils which are enlarged, many hugely so ....., and now and again they present evidence of follicular inflammation." How, under these circumstances, the cause of diphtheria can have baffled even the most superficial inquiry is astounding. In almost all the details of its sanitary history, this institution presents some of the most essential characteristics of places to which diphtheria is known to cling with exceptional tenacity, and the disease has, more or less masked or self-evident in type, been long prevalent there. Locally, we learn, there has been a suggestion that the proximity of the Croydon sewage farm, which lies almost immediately to the north and east on the opposite side of the Wandle, has been the cause of this chronic state of illness amongst the inmates; but, as Dr. Gresswell very properly says, until the sanitary condition of the institution itself has been put upon a proper footing, any attempt at differentiation of possible causes of the chronic illnesses in persons living therein would certainly be futile. We have no wish to exonerate the sewage farm. On the contrary, the influence of sewage farms on public health is one of the subjects concerning which accurate and trustworthy information is much needed. But there are other populations near to the Croydon farm, and, so far as we know, they have not suffered in the same way as this institution has; whereas on their own premises the governing body of the asylum will find in abundance the very conditions which, if they do not continually cause initial cases of diphtheria, ensure its persistent prevalence when once the disease has been introduced.

Diphtheria in the Rural District of Walsingham, by Dr. GRESSWELL.—Walsingham registration district was one of the districts which suffered from diphtheria during the great epidemic which commenced in 1858. During that year the fatal cases were only 3 in number, but they steadily rose year by year to 27 in 1862, and then ensued a diminution, marked, however, by a temporary increase again in 1873. But it is to be noted that ever since 1858 deaths have, with the exception of one single year, been every twelve months ascribed to diphtheria, and even in that year, as in nearly all the others, fatal attacks of throat diseases, which we have now come to regard as at least allied with diphtheria, occurred. The investigation carried out did not lead to any new information as to the etiology of this obscure disease, and this was necessarily the case because so many general insanitary conditions prevail there that, until these are eliminated one by one, in so far as cause is concerned, it is impossible to ascribe the disease to any definite condition. Mr. Power inspected two of the parishes in this district in 1875, and he then found diphtheria to prevail in connexion with a want of proper sewerage and drainage, a scarcity of drinking-water in dry seasons, and insufficiently ventilated dwellings. It is difficult to see that there has been even a semblance of improvement since that date, for even at Fakenham, which is the market town and has a considerable population, the cottages were found to be damp and ill-ventilated. Foul cesspools exist which ventilate into the houses through untrapped sink-pipes and ill-ventilated soil-pipes; and privy vaults, ash-pits, and filth accumulations lie in the immediate neighbourhood of houses and wells. A district thus circumstanced can hardly be expected to get rid of a disease like diphtheria, and the various details given in Dr. Gresswell's report go far to show how seriously they must necessarily affect public health in the district. To one point especial prominence is given—namely, the damp condition of the dwellings—a condition with which diphtheria has again and again been found to be associated. Thus, at Stiffkey a large number of houses are built into the hillside without protection from the wet of the higher land above, the back walls being, in consequence, damp and covered with various moulds. The floors of the lower rooms are generally below the level of the ground outside, which is both unpaved and undrained; and this condition of dampness is aggravated by the absence of eaves-spouting, which, together with a dilapidated state of the roofs, ensure dampness of the upper as well as of the lower rooms. Under such circumstances, the Walsingham registration district again in 1884 suffered from a diphtheria epidemic, which caused 21 deaths, in addition to 8 more from other throat affections, and the disease extended well into 1885. Indeed, according to the Registrar-General's quarterly returns, no less than 12 diphtheria deaths are recorded during the four quarters of 1885 for the registration district. With the exception of the parish of Wells-next-the-Sea, the district is under the administration of the rural sanitary authority, and their attention may well be called to the state of the area under their jurisdiction with regard to the removable causes of disease which have so long prevailed in it.

VITAL STATISTICS.

HEALTH OF ENGLISH TOWNS.

In twenty-eight of the largest English towns 5273 births and 3321 deaths were registered during the week ending May 15th. The annual death-rate in these towns, which had been equal to 19·8, 20·2, and 20·6 per 1000 in the preceding three weeks, declined last week to 19·1, and was lower than that recorded in any week since October, 1885. During the first six weeks of the current quarter the death-rate in these towns averaged 20·0 per 1000, and was 3·2 below the mean rate in the corresponding periods of the ten years 1876-85. The lowest rates in these towns last week were 8·8 in Huddersfield, 10·4 in Birkenhead, 14·2 in Derby, and 16·0 in Sunderland. The rates in the other towns ranged upwards to 24·1 in Blackburn, 24·3 in Hull, 27·8 in Preston, and 28·2 in Manchester. The deaths referred to the principal zymotic diseases in the twenty-eight towns, which had been 382, 364, and 367 in the preceding three weeks, further declined last week to 324, a considerably lower number than in any recent week; they included 120 from whooping-cough, 90 from measles, 39 from diarrhœa, 30 from diphtheria, 23 from scarlet fever, 21 from "fever" (principally enteric), and 1 from small-pox. No death from any of these zymotic diseases was recorded last week in Huddersfield, whereas they caused the highest death-rates in Blackburn, Portsmouth, and Bolton. The greatest mortality from whooping-cough occurred in Salford and Bolton; from measles in Preston, Portsmouth, and Bolton. The 30 deaths from diphtheria in the twenty-eight towns included 19 in London, 3 in Liverpool, and 2 in Portsmouth. Small-pox caused 3 deaths among the residents of London and its outer ring, 1 in Blackburn, and not one in any of the twenty-six other large provincial towns. The number of small-pox patients in the metropolitan asylum hospitals situated in and around London, which had slowly increased in the previous seven weeks from 7 to 27, had further risen to 30 on Saturday last; 9 cases were admitted to these hospitals during the week, against 3 and 11 in the preceding two weeks. The Highgate Small-pox Hospital contained 4 patients on Saturday last, 2 cases having been admitted during the week. The deaths referred to diseases of the respiratory organs in London, which had been 296 and 309 in the previous two weeks, declined last week to 293, and were 49 below the corrected average. The causes of 83, or 2·5 per cent., of the deaths in the twenty-eight towns last week were not certified either by a registered medical practitioner or by a coroner. All the causes of death were duly certified in Brighton, Norwich, Derby, and Wolverhampton. The largest proportions of uncertified deaths were registered in Halifax, Bristol, Bolton, and Plymouth.

HEALTH OF SCOTCH TOWNS.

The annual rate of mortality in the eight Scotch towns, which had been equal to 23·1 and 22·3 per 1000 in the preceding two weeks, was 22·2 in the week ending May 15th, and exceeded by 3·1 the mean rate during the same week in the twenty-eight English towns. The rates in the Scotch towns last week ranged from 8·2 and 12·5 in Perth and Greenock, to 23·7 and 27·6 in Leith and Glasgow. The 548 deaths in the eight towns almost corresponded with the number in the preceding week, and included 17 which were referred to measles, 14 to whooping-cough, 13 to diarrhœa, 5 to "fever" (typhus, enteric, or simple), 3 to diphtheria, 3 to scarlet fever, and not one to small-pox; in all, 55 deaths resulted from these principal zymotic diseases, against 51 and 62 in the preceding two weeks. These 55 deaths were equal to an annual rate of 2·2 per 1000, which exceeded the mean rate from the same diseases in the twenty-eight

English towns. The fatal cases of measles, which had been 15 and 17 in the previous two weeks, were last week again 17, of which 12 occurred in Edinburgh and 4 in Leith. The 14 deaths from whooping-cough showed a further decline from the numbers returned in the preceding two weeks and included 12 in Glasgow. The 13 fatal cases of diarrhœa showed a further increase upon recent weekly numbers; 6 occurred in Glasgow and 4 in Paisley. The deaths referred to different forms of fever, which had been 2 in each of the preceding two weeks, rose to 5, and included 2 in Edinburgh and 2 in Leith. Of the 3 fatal cases of diphtheria 2 occurred in Glasgow. The deaths from scarlet fever, which had increased from 3 to 8 in the previous three weeks, declined again to 3, all of which were returned in Glasgow. The deaths referred to acute diseases of the respiratory organs in the eight towns, which had been 128 and 111 in the preceding two weeks, further declined last week to 108, which, however, exceeded by 10 the number in the corresponding week of last year. The causes of 67, or 12 per cent., of the deaths in the eight towns last week were not certified.

HEALTH OF DUBLIN.

The rate of mortality in Dublin, which had been equal to 24·4 and 27·8 per 1000 in the preceding two weeks, declined again to 23·3 in the week ending May 15th. During the first six weeks of the current quarter the death-rate in the city averaged 26·8 per 1000; the mean rate during the same period did not exceed 18·8 in London and 19·0 in Edinburgh. The 158 deaths in Dublin last week showed a decline of 30 from the high number in the previous week, and included 8 which were referred to the principal zymotic diseases, against 13 and 14 in the previous two weeks; 3 resulted from "fever" (typhus, enteric, or simple), 2 from scarlet fever, 2 from whooping-cough, 1 from diarrhœa, and not one either from small-pox, measles, or diphtheria. These 8 deaths were equal to an annual rate of 1·2 per 1000, the rates from the same diseases being 2·2 in London and 3·1 in Edinburgh. The fatal cases of whooping-cough, which had been 5 and 7 in the previous two weeks, declined last week to 2. The 3 deaths from "fever," however, showed an increase upon the low numbers in the previous two weeks. Four inquest cases and 1 death from violence were registered; and 45, or more than a quarter, of the deaths were recorded in public institutions. The deaths of infants corresponded with the number in the previous week, while those of elderly persons showed a considerable decline. The causes of 22, or nearly 14 per cent., of the deaths registered during the week were not certified.

Correspondence.

"Audi alteram partem."

"THE PRESENT SYSTEM OF MEDICAL EDUCATION IN LONDON."

To the Editor of THE LANCET.

SIR,—Dr. Moxon attempts to solve the vexed question of the propriety of granting degrees in medicine to pass men of the Royal Colleges of Physicians and Surgeons, by suggesting that they should receive a degree bearing the stamp of an Albert University. If we read Dr. Moxon's interesting paper, we shall find that he speaks of the degree of the London University as being wholly unattainable by ordinary pass men, and as the edge of the unattainable to ordinary class men. He therefore proposes to brand these—I am afraid we must say third-class—men with the Albert degree, a degree which henceforth must bear the impress of inferiority. Whether a man's success in life as a practitioner depends upon his holding a degree in medicine or not, I cannot say. I only do know that hundreds of our best practitioners never have had a degree. I therefore question the propriety of issuing wholesale a batch of degrees, the very possession of which will at once mark the recipient as being below the average class man of our schools. Dr. Moxon enforces his argument by stating that the medical schools have so far improved in their teaching that they should now take rank as universities, and, as such, should therefore be able to guarantee to their respective students—as a reward for diligence—a degree in medicine. But I would ask, Have our universities been standing still while the medical schools have been making these grand strides? Have they not, too, improved as regards their teaching beyond all precedent?—improved also in certain definite lines—namely, that the best form of instruction is professorial, in other words should be centralised? With our medical schools it is the reverse, they are doing everything in their power to promote decentralisation. They are, in fact, vying, the one with the other, in providing scientific teaching, whereas their legitimate function is to utilise to the best of their ability the splendid mass of material they stand possessed of to promote clinical teaching in its widest sense. I believe I am right in asserting that true advanced university teaching of the day is becoming more and more opposed to "steps;" men are left more and more to themselves. The best teachers—professors—are obtained as instructors, but the men are less and less harassed by other lectures than those they prefer to attend. Is this the case with our medical schools in London? Are not our students surfeited with lectures, prescribed by the curriculum of the Royal Colleges, which, moreover, as they cannot themselves but doubtfully guarantee the quality, are careful to insist on quantity in its place?

Let the medical schools of London hand over their scientific teaching to universities and science schools. Let them confine themselves to purely professional matters, electing the various members of their staff rather with the view to professional knowledge than as teachers suitable to their science classes. Let the affiliated Colleges revise their curriculum, removing at least some of their "steps," and we shall soon find the Albert degree will be the one unasked for.

I am, Sir, yours faithfully,

DONALD W. CHARLES HOOD, M.D. Cantab.

Green-street, Park-lane, May, 1886.

THE IMPORTANCE OF WORK IN THE WARDS.

To the Editor of THE LANCET.

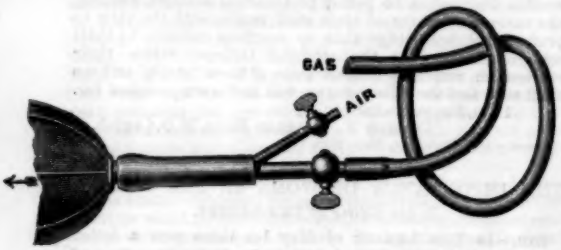
SIR,—In THE LANCET of May 1st there was a letter quoting the opinion of Sir Benjamin Brodie on the effect of the "prize-giving" system on the education of medical students. In the succeeding number Mr. Buckston Browne sends an extract from Sir B. Brodie's autobiography, giving his opinion on the effects of the over-attendance on lectures. In the issue of May 15th a correspondent writes—Thirty years ago the system of medical instruction was as crude as the system of examinations was undeveloped." In the autobiography above mentioned Sir B. Brodie tells how he was appointed assistant-surgeon to St. George's Hospital in 1808, not being then twenty-five. Soon after his appointment Mr. Home left him the almost entire charge of his in-patients, and he shared with Mr. Robert Keate, the senior assistant-surgeon, the charge also of the patients of Mr. Gunning, who was doing duty with the army in the Peninsula. He says: "I had the opportunity at an unusually early age of acquiring a large experience in hospital practice; and to this circumstance my early professional success may very much be attributed. Six months in the year I passed several hours daily in the wards of the hospital, taking notes of the cases and communicating freely with the students. During the other six months the whole of the time I could spare from my employment as a teacher of anatomy was devoted to the hospital. The custom at St. George's, and indeed at all the other metropolitan hospitals, had hitherto been for the surgeons to go round the wards only on two days in the week, not attending otherwise except there were operations to perform or severe accidents which made their assistance necessary. Mr. Keate and myself were the first persons who adopted another mode of proceeding. We were at our posts in the hospital daily and superintended everything, and there never was an urgent case which we did not visit in the evening, and not infrequently at an early hour in the morning. This was of as much importance to the students as it was to the patients and ourselves, and the effect of it was soon perceptible in the increase of zeal and diligence on their parts and in their increasing numbers. After some time I appointed clinical clerks. I also began to deliver clinical lectures, and I believe that they were the first lectures of the kind which were ever delivered in a London hospital." I am, Sir, yours truly,

May, 1886. F.R.C.S.

AN IMPROVEMENT IN PAQUELIN'S CAUTERY.

To the Editor of THE LANCET.

SIR,—Everyone who has used this instrument must know the extreme value it possesses when it will work properly; but I think there can be few who have not experienced an aggravation not equalled by anything that I know, by the instrument refusing to work exactly at the time when it is most wanted. I have tried many expedients to remove the difficulty, and have made many experiments to discover the causes of the failures. I have found that they lie chiefly in two directions—the most common being that by some accident the bottle of benzine has been tilted, so that a little of the fluid has run into the inside of the instrument. This renders it for a time perfectly useless, and sometimes permanently so. The second, and most frequent cause of failure is that the passage of the air over the surface of certain kinds of benzine does not enable it to become charged with a sufficient percentage of the inflammatory gas. I have therefore devised two methods of overcoming the difficulties. The first is to use ordinary domestic gas for the purpose of the cautery by the addition of a tube and double nozzle pipe, which is made perfectly clear by the accompanying woodcut. The pipe for the gas is slipped over



the burner of the gas jet, air is admitted by the second pipe, and the mixture takes place in the ball hand-pump, part of which is seen in the woodcut. The second method is, instead of having a bottle such as is usually provided with the cautery, to have one which is identical with the reservoir of Junker's apparatus for methylene, only of a considerably larger size. In this way the air is saturated with the benzine, and there is less risk from the shape of the bottle that the fluid benzine will run along the tube of the cautery. The improvements are neither complex nor expensive, and I find that they obviate many disappointments. I may say that for *heavy* work, such as the searing of pedicles of either uterine or ovarian tumours, or the searing of large surfaces of adhesion, I have devised a special form of gas cautery, which is for these purposes superior to Paquelin's. It is quite simple and never gets out of order, and can be had from Mappin and Co., 121, New-street, Birmingham.

I am, Sir, yours &c.,

Birmingham, May 17th, 1886. LAWSON TAIT.

"ROTHELN: A POINT IN DIAGNOSIS."

To the Editor of THE LANCET.

SIR,—The importance of the enlarged cervical glands, and the early stiffness of the neck resulting therefrom, as a "point in the diagnosis" of rotheln or rubeola being now raised in your columns, I may be pardoned for quoting two short sentences from an article "Rubeola, &c.," which you did me the honour of inserting in THE LANCET (vol. i., 1883, p. 995).

Describing the early symptoms of the disease, I then wrote: "Except the enlarged glands, *usually first to appear and last to go*, cough persists longest." And again, dealing with the glands: "Tender to the touch, *they give rise to the early stiffness of the neck*, and sometimes occasion actual pain." It is most satisfactory to me to find three members of the profession independently confirming these observations. My attention was first strongly directed to this "point" about 1879-80, when a patient was sent into hospital suffering from a feeling of malaise, stiffness of the neck and enlarged cervical glands, a temperature of 100° F., and naught else. As I had at the time several patients from the same house of business suffering from rubeola, I put the man aside as a possible case of that disease. Next day the supposition of the night before became established as a fact. I have since, especially in private practice, on a few occasions been able to confirm this observation. However, without the knowledge that a person so suffering had very recently resided in a house or district in which rubeola was rife, I should be disinclined to attach to this symptom any greater value than that of raising a *suspicion* of the disease. Another point to which I attached, and still do, importance—viz., symmetry in the glandular enlargement—has, I see, also been observed.

I am, Sir, yours faithfully,

Ladbroke-grove, W., May, 1886. W. TONGE-SMITH.

MANCHESTER.

(From our own Correspondent.)

THE VICTORIA UNIVERSITY.

At the recent meeting of the Court of the Victoria University several important matters were considered. Dr. Greenwood resigned the Vice-Chancellorship, which office he has held since the establishment of the university, and regret is felt in many quarters that a change has had to be made. Professor Ward was unanimously elected to succeed him for a term of two years; no one took a more active and important part in the founding of the university, and the selection has given universal satisfaction. Dr. Greenwood and Professor Rendall, of University College, Liverpool, were elected pro-Vice-Chancellors. At the same meeting it was resolved to apply to Government for an annual grant from the national exchequer in aid of the expenses of the University, as it is without funds, except such as it derives from the two colleges at present affiliated to it. Another subject discussed was the extension of the work of the University in connexion with teaching bodies and educational institutions where instruction of various kinds is given. It was also resolved to make application to the Government for a separate representative on the Medical Council, in lieu of the proposed joint representation with Durham University, as provided in the Medical Act Amendment Bill now before Parliament. Our new Professor of Physiology has now got thoroughly to work in his new quarters, and at the inaugural address delivered by him on the 11th inst., he produced a very favourable impression upon his hearers; he concluded an interesting "introductory" by expressing a hope that the Victoria University might to some extent follow upon the lines of the Scottish universities, and make its degrees accessible to every student who worked in a fair and steady manner, and that they should not be beyond the reach of the average man to obtain.

THE ASSIZES.

The assizes now being held have had an unusual number of cases of homicide for trial, amongst them being that of a case of poisoning by a surgeon's assistant, already alluded to in these columns. Two patients, one a baby and the other a woman, both died with all the symptoms of opium poisoning after taking medicine supplied by the accused. In the first case, the magistrate acquitted the prisoner, but in the second, the case was sent to the assizes. Analysis showed morphia to be present to a very large extent, though no satisfactory explanation of how it came to be in the mixture was forthcoming at the trial. The jury returned a verdict of manslaughter, and a sentence of six months' imprisonment was passed.

HEALTH AND RECREATION.

The open spaces committee of the Manchester and Salford Sanitary Association lately offered the corporation to take charge of the open space in Mount-street, Ardwick, and fit it with gymnastic appliances; and if the experiment of thus converting it into a recreation-ground should prove successful, to transfer all the appliances, &c., free of charge to the management of the Parks Committee. Steps have been taken to continue during the present summer the much-appreciated children's holiday movement, whereby children from our courts and alleys are sent out into the country for a period of three weeks. It is to be hoped that 1000

children may thus be sent within the next few months. It is stated that the cost per child is twenty shillings; all the work in connexion with the management of this beneficial scheme is voluntary and unpaid.

MEDICAL OFFICERS OF HEALTH.

The Sanitary Association has followed up its petition on the status and qualifications of medical officers of health by a deputation to the President of the Local Government Board on Friday, the 14th inst. Sir H. Roscoe introduced the deputation to Mr. Stansfeld, and Dr. Ransome explained to the President what it was the Association desired to bring before his notice, and the suggestions were favourably received by him.

The Local Board of Withington have decided to grant a fee of 2*s.* 6*d.* to every medical man supplying information of the existence of a case of infectious disease.

Manchester, May 17th.

LIVERPOOL.

(From our own Correspondent.)

THE ROYAL VISIT.

THE visit of Her Majesty to this city, extending from 8 A.M. on the 11th till 10 A.M. on the 13th, was a most successful one in all aspects except the weather. Instead of the proverbial Queen's weather, which might reasonably be anticipated in this "merry month of May," there were piercing winds and drenching rain combined—the weather was, indeed, as wretched as it could have been. In spite of this, however, the Queen, with a courage which was duly appreciated, went through the whole of the heavy duties which she had undertaken. On the first day of the visit, after travelling all night, she opened the International Exhibition with full State ceremonial. On the next day she was out in an open carriage for fully three hours, in addition to going for a trip on the Mersey. This, seeing that her sixty-seventh birthday rapidly approaches, is very satisfactory proof of her capacity of physical endurance, as well as her desire to comply with the wishes of her subjects, and to appear openly among them. In consequence of the precautions taken by the authorities to prevent accidents, noticed in a previous letter, not one occurred during Her Majesty's visit, though unfortunately one has occurred since. On Saturday last a triumphal arch, erected in a leading thoroughfare, fell down suddenly during a heavy north-west gale, causing severe injuries to several persons. The worst case is that of a lad aged eleven years, who sustained a concussion of the brain, but who is progressing fairly well. At the request of the Queen, conveyed through General Sir H. F. Ponsonby, the Mayor, Sir David Radcliffe, telegraphed the condition of the injured.

SIR DYCE DUCKWORTH.

The honour conferred upon this gentleman is an event of local interest, Sir Dyce being a Liverpool man. He is the youngest son of the late Robinson Duckworth, and was born in Liverpool in 1840. He was educated at the Royal Institution here, under the late Dr. Dawson Turner, after which he commenced a mercantile career in the office of Messrs. Holderness and Chilton, probably there acquiring business habits, which have been very useful to him ever since. He received his medical education at the Edinburgh University and St. Bartholomew's Hospital, graduating M.D. Edin. in 1863. Sir Dyce obtained high honours, the gold medal, and the prize for his thesis, "Observations on the Anatomy of the Suprarenal Capsules." He is a brother of Canon Duckworth.

REMOVAL OF A CITY CHURCHYARD.

For the purposes of city improvements the churchyard of St. Thomas, Park-lane, is in course of removal, the remains of those interred being removed for interment elsewhere, either by their surviving friends or by the authorities. In the latter case, the remains are conveyed to the new cemetery at Kirkdale, situated a few miles off. The church was built 136 years ago, on land outside Liverpool, in a lane leading to Toxteth Park. Now it is the centre of a thickly populated district, and hemmed in on all sides by houses and shops. The graveyard was never a public one, being laid out in vaults and graves, mostly bricked ones, for the use of private families of the better class. The soil was unsuitable, being a very stiff clay, and the tendency of vaults and bricked graves is to retain water. The contrast between this old burial-ground and our local cemeteries, where the soil is suitable, well-drained, and in accordance with the most recent sanitary requirements, is very striking. The churchyard was closed by Order in Council in 1854, but a few burials have been permitted in family tombs by the Home Secretary.

A SUICIDAL EPIDEMIC.

On the 15th inst. there were no fewer than five cases of attempted suicide brought before one of the borough justices. One was that of a married woman thirty-seven years of age, who had taken poison, and whose excuse was that she and her husband had been drinking together. The remaining cases were those in which suicide had been attempted either by the knife or poison, and in all drink had been the exciting cause of the rash act. This is confirmatory of an old tradition that May is a month for suicides.

Liverpool, May 18th.

NORTHERN COUNTIES NOTES.

(From our own Correspondent.)

SALT AND CHEMICALS.

A FEW years ago I gave you some particulars of the discovery by accident of a bed of salt of about 120 ft. in thickness in the valley of the Tees. Messrs. Bolckows and Vaughan, the great iron manufacturers near Middlesborough, were boring for water, when, to their great surprise, they came upon the bed of salt. This discovery has had the effect of giving considerable impetus to the chemical manufactures of the north, the decomposition of the chloride of sodium by sulphuric acid being, as it were, the first step in the manufacture of various chemicals of commercial importance. The chemical trade in the north has been for a considerable period in a languishing condition. A company who own the largest chemical works in the country were rather unfortunate last year in their explorations on the Tees for salt, but it is said that they also have now succeeded in reaching the salt bed, and are raising a considerable quantity, which is sent to their works here. The yearly consumption of salt at these great works is 27,000 tons, and the company expect to raise this quantity for their own supply. This acquisition must prove of immense importance in the economics of the chemical trade in its present state.

INTERNAL BURNS.

An inquest was lately held at Cleator Moor on the body of a labourer employed at one of the large ironworks situated near that place. The deceased, it appears, was breaking some red-hot metal, when he fell forward. He did not appear to be sufficiently injured to account for his death, but it was shown by Dr. Matthers that the deceased died from internal burns through inhaling hot air and sand from the iron bed.

DEATH UNDER CHLOROFORM AT NEWCASTLE INFIRMARY.

A death under chloroform took place last week at the Newcastle Infirmary. It was shown at the inquest by Dr. Maynard, house-surgeon, that the deceased, a quarryman, sustained an injury to his knee by falling on the pavement. Mortification set in, and symptoms of absorption of putrid matter. It was decided to amputate the thigh. Chloroform was given with due care, but just before the operation the patient died. It was further shown that on admission he was under the influence of drink, and the post-mortem disclosed old-standing disease of the heart, also fatty degeneration of the liver and kidneys; altogether he was a bad subject for the administration of chloroform, and for any operation without its aid.

TYPHOID ON BOARD THE "WELLESLEY."

One of the boys on board the *Wellesley* training ship in Shields harbour having been attacked by typhoid fever, he was, under the direction of the medical officer of the vessel, in order to prevent the possibility of the disease spreading, removed this week to the Tyne port sanitary authority's floating hospital at Jarrow. I believe there are at present between 300 and 400 boys on board the *Wellesley*. This

vessel is always considered one of the sights of the Tyne and the little sailors have so far been kept up to a high standard of health and general good behaviour.

UNIVERSITY OF DURHAM MEDICAL SOCIETY.

This young and sprightly Society gave a general entertainment last Friday in the Assembly Rooms in this city, which was highly successful in point of attendance and otherwise. Drs. Drummond, Mears, and others did the graceful honours of receiving the guests. Very few buildings in the north are so well adapted for an entertainment of this nature as the Assembly Rooms, and on this occasion they looked at their best. The attendance of practitioners and their friends from a distance was very numerous, special trains being provided for the visitors from Sunderland, South Shields, &c. Every thought was considerately shown for the comfort of the guests, and the University of Durham Medical Society deserves to be congratulated upon the success of this brilliant affair.

Newcastle-on-Tyne, May 16th.

EDINBURGH.

(From our own Correspondent.)

EDINBURGH UNIVERSITY COURT.

AT its meeting on the 17th inst. the Court formally sanctioned the arrangements by which a schoolmaster's diploma is to be conferred by the University of Edinburgh. A final assent was also given to the regulations for the new lectureship on the Philosophy of Natural History, to which Mr. Romanes has been appointed for a term of five years. This course is to consist of six lectures annually, to be delivered in the University, and to be free to all matriculated students; the necessary funds to endow the lectureship having been provided by the Earl of Rosebery, acting upon the advice of Professor Cossar Ewart.

THE ROYAL SOCIETY OF EDINBURGH.

An important paper by Dr. Griffiths has been communicated to the Society by Professor Crum-Brown, dealing with the effects of ferrous sulphate in destroying the spores of certain parasitic fungi which attack farm crops. Dr. Griffiths, amongst other species, has made a special study of the *Penospora infestans*, the cause of the potato disease. The spores of this organism may be kept as a dry dust for many months without losing their vitality. Following the lines of Duclaux's classical researches, Dr. Griffiths has tested the vital relation of these spores to a variety of chemical agents. Potash salts prove highly favourable to their development, whilst ferrous sulphate, although in general a very valuable plant food, is found to exert a selective devitalising influence upon the *Penospora*. A weak solution of the salt applied to a diseased plant was found to destroy the parasite, whilst it left the structure of the higher organism uninjured. Dr. Griffiths recommends as a practical outcome of these researches that in warm, damp seasons, when the disease is specially liable to be developed, manures should be employed, in the composition of which potash salts should have their place taken by small quantities of ferrous sulphate. A paper by Mr. Kidston was read at the same meeting, showing that what have been considered as fossil parasitic fungi in certain ferns from the carboniferous formations are in reality a form of fructification. Lord Rayleigh, M. Milne-Edwards, the Abbé Renard, and Professors Newton and Thalen have been elected honorary Fellows of the Society.

A SUBURBAN HOSPITAL FOR INFECTIOUS DISEASES.

In consequence of the change of arrangements which has placed the City Fever Hospital under the direct control of the Corporation of Edinburgh, it has become necessary to meet the requirements of the outlying districts, which can be no longer provided for at the expense of the City ratepayers. The Board of Supervision for Scotland has accordingly issued notices to the various rural authorities calling upon them to provide hospital accommodation for such cases of infectious disease as occur within their jurisdiction. A plan has been submitted by which these authorities can join in supporting a single institution which will supply the needs of all, upon a system of proportional maintenance based on the census reports from each district. It is expected that this will be generally acquiesced in, and already plans for the proposed hospital are in course of preparation.

ROYAL PHYSICAL SOCIETY.

The annual dinner of this Society was held on the 14th inst., the chair being occupied by Professor Sir W. Turner, F.R.S., the President of the Society. In proposing the toast of the Royal Physical Society, the chairman gave an interesting *résumé* of its history, which has extended over more than a century, and referred to the existence of such bodies as an index of, as well as a stimulus to, the intellectual and scientific life of a community. In replying to the toast of the Universities of Scotland, Professor Chiene reviewed the present flourishing condition of the Universities of Edinburgh, Glasgow, and Aberdeen, and said it was the duty of all loyal Scotsmen to do everything in their power to support the smallest and the oldest of the Scottish Universities, St. Andrews. He advocated the affiliation of the rapidly prospering University College of Dundee to the old University, as a measure calculated to prove of the very highest value to both institutions.

Mr. F. Grant Ogilvie, M.A., B.Sc., F.R.G.S., of Gordon's College, Aberdeen, has been appointed Principal of the Heriot-Watt College, a most important institution in Edinburgh for providing secondary education in technical subjects and in natural science for the classes whose primary education is provided for by the School Board.

Dr. D. Noël Paton, of Edinburgh, has been appointed Examiner in the Institutes of Medicine and in Zoology in the University of Aberdeen.

Edinburgh, May 18th.

PARIS.

(From our own Correspondent.)

PRESENTATION TO M. CHEVREUL.

AFTER an illness of two or three months, M. Chevreul, the illustrious centenarian, paid his first visit yesterday to the Academy of Sciences. On his entry the whole assembly rose to welcome his return amongst them, and the president, Jurien de la Gravière, took the opportunity of tendering him the congratulations of the Academy on his recovery. It had been decided that some token should be presented to M. Chevreul to commemorate his 100th birthday, which, although it does not take place until Aug. 31st next his colleagues, most of whom would be away for their holiday, were anxious to anticipate by offering him their congratulations, accompanied by a magnificent statue in bronze representing History, which was designed by M. Paul Dubois, the well-known sculptor. The president then, in very neat and touching terms, traced the life and works of this hero of the day, in doing which he said that the members of the Academy congratulated their venerable colleague, not only for the green old age that he had attained, but for the good use he had made of his life. M. Chevreul then rose, and, although under the influence of great emotion, thanked the Assembly, in a distinct and audible voice, for this mark of their affection and esteem, and added that it was mainly to temperate living that he attributed his longevity.

DISTURBANCE AT THE SCHOOL OF PHARMACY.

A disturbance took place at the Paris School of Pharmacy—a rather unusual circumstance—on the occasion of the opening lecture of the summer session by M. Chatin, Professor of Botany. When the professor began to speak he was interrupted by groans and shouting, whilst raw eggs, potatoes, and pebbles were hurled, but fortunately fell short of the rostrum. The students, on an inquiry being made, could formulate no grievance against their professor, but it oozed out that he was too much of a botanist for them, as he preferred the study of plants to that of chemistry. The fact is, M. Chatin is rather severe at the examinations, and it is only those students who are backward in botany who complain of the inordinate zeal of the professor in that particular branch, especially as he required them to accompany him every Sunday to the country for the purpose of

herborisation, which was distasteful to the students, as it spoiled their Sunday holiday. Notwithstanding the interruptions, M. Chatin continued his lecture to the given time (one hour), and on his retiring a most disgraceful scene took place, projectiles being thrown in all directions. In the mêlée Dr. Flahaut, Professor of the Faculty of Montpellier, a former pupil of M. Chatin, and who came to attend the lecture, attempted to remonstrate with the students, when he was struck on the head with his own umbrella, causing a wound, which, however, is not of a serious nature. In his report to the Minister of Public Instruction of the disturbance M. Chatin sent in his resignation as director of the school, but not as professor of botany, as he considered the study of that branch, as well as chemistry, indispensable to pharmacology. As there seemed to be no signs of reconciliation on the part of the students, the Minister of Public Instruction has thought proper to close the school for the present.

DEATH OF DR. HENRI FAUVEL.

Dr. Henri Fauvel, a distinguished chemist, son of the late physician of the Hôtel Dieu, and the well-known hygienist, was accidentally drowned a few days ago while making some experiments with the Seine water near the bridge of Epinay, just outside Paris. He was a young man of great promise, and was a former pupil of the late Professor Wurtz. He was attached to the Municipal Laboratory of Paris, where he greatly distinguished himself as an analyst and hygienist.

Paris, May 15th.

ROYAL COLLEGE OF PHYSICIANS.

A COMITIA of the Fellows of the Royal College of Physicians was held on the 20th inst., Sir W. Jenner, Bart., President, in the chair. The intimation by the President that Her Majesty had been pleased to confer the honour of knighthood upon Dr. Dyce Duckworth, treasurer of the College, in recognition of his services in connexion with the Examination Hall, was received with applause.

A Report from the Medical Bill Committee was read. It advised the introduction into Clause 3 (*a*), enumerating the bodies competent to hold qualifying examinations, of the words "or medical corporation" after the word "university"; in Clause 4 the omission of the words "assigning power to the Privy Council, to reinstate medical authorities which have been previously deprived of their rights to hold qualifying examinations"; and the total omission of Clause 5, which provides for qualifying examinations by single corporations, with the assistance of examiners appointed by the Medical Council. The Committee also expressed their high opinion of the existing examinations for certificates in Sanitary Science, and deemed the suggestion that such certificates should be capable of registration worthy of being entertained. It was pointed out by Sir H. Pitman that both Sir Lyon Playfair and Sir H. Holland had given notice of amendments in the Bill to introduce the official recognition of such certificates. The report was adopted, an amendment declining to press the subject of registration of Sanitary Science qualifications being rejected.

A Report from the Building Committee was read. After alluding to the ceremonial of March 24th, it stated that the Examination Hall will probably be completed and ready for occupation next year, on the anniversary of the day on which foundation stone was laid. The Committee also drew attention to the unoccupied plot of ground adjoining the Hall, which was also in the possession of the two Colleges. In adopting the Report the College referred the question as to how that site may best be utilised to a special committee, to confer with a committee of the College of Surgeons upon the subject.

The Report of the Croonian Trust Committee was again brought under notice, and several alternative schemes and proposals were discussed. No decision was arrived at, the consideration of the matter being again adjourned.

MEDICAL NOTES IN PARLIAMENT.

The Medical Acts Amendment Bill.

IN the House of Commons on the 17th inst., in reply to Dr. Farquharson, Sir L. Playfair said he did not propose to do more that night than to get the Bill into committee and immediately report progress.—Mr. F. Powell suggested that as the right hon. gentleman had several important amendments to propose, it might be well to commit the Bill *pro formâ*, in order that it might be reprinted with the amendments. Sir L. Playfair said he did not think the character of the amendments rendered that course necessary; they referred mostly to matters of detail. The House afterwards went into committee on the Bill, and, in accordance with the above statement of Sir Lyon Playfair, progress was immediately reported.

Small-pox at Wooburn

On the 18th inst., Mr. Borlase, in reply to Mr. Lawson, said he very much regretted the outbreak of small-pox at Wooburn Mills. The Local Government Board had no authority under which they could secure the disinfection of rags used in paper-making so as to prevent contagion. The Board had enforced the vaccination and revaccination of those engaged in paper-making as the most valuable means of protecting them from small-pox.

THE SERVICES.

INDIA OFFICE.—The Queen has approved of the following amongst other promotions among the officers of the Staff Corps and Indian Military Forces made by the Governments in India:—Surgeon Percy Hugh Benson, Surgeon John Lancaster, and Surgeon Walter Gawen King, all of the Madras Medical Establishment, to be Surgeons-Major.

ADMIRALTY.—The following appointment has been made:—Surgeon Eli T. Ede, to the *Triton*.

Obituary.

DR. ROBERT SCOTT ORR.

WE regret to announce the death of Dr. Robert Scott Orr of Glasgow, which took place very suddenly on May 15th. Dr. Orr was a native of Edinburgh, his father being a member of a well-known firm of chemists. He was apprenticed to Sir George Newbegging, a surgeon in that city, and studied at the University, graduating in medicine there in 1840. Subsequently he went to Glasgow as assistant to Dr. Hutcheson of the Royal Asylum for Lunatics, Gartnavel, and, after some valuable experience there, he was appointed in 1843 Superintendent of the Glasgow Royal Infirmary. He signalised his period of office by publishing annually a very valuable series of statistical tables of the cases in the hospital. On leaving the infirmary he practised for several years in Dunoon, one of the Clyde watering-places, and formed a connexion with visitors from Glasgow, which stood him in good stead in after-life. For more than thirty years he has been a well-known Glasgow physician and consultant, and has occupied a prominent place in the Faculty of Physicians and Surgeons. He was president of that corporation from 1880 to 1883; and for the last eight years he has been the member of the General Medical Council elected by the Faculty, and has gained the esteem of his fellow-councillors by his sound judgment, courtesy of manner, and unswerving rectitude and devotion to his trust. For several years he acted as Extra-professorial Examiner in the University of Glasgow, and also an examiner in medicine to the Faculty of Physicians and Surgeons. He was long a physician to the Royal Infirmary, and as such he was an accurate and painstaking observer of disease, and was loved as few men are loved by the patients under his care. The *Glasgow Medical Journal* was frequently enriched by the records of the results of his hospital experience.

Glasgow can ill spare a man like Dr. Scott Orr, for he was the friend of aspiring talent, and helped by kind word and

generous deed many a young practitioner during their early struggles. In all the years of his professional life we firmly believe he made no enemies. His remains were followed to the grave by a large number of his professional brethren. Dr. Orr was sixty-seven years of age, and leaves three sons and four daughters. One of his sons is a medical practitioner in Kensington.

MALACHY J. KILGARRIFF, F.R.C.S.I.

THIS gentleman died at his residence, in Harcourt-street, Dublin, on the 18th inst., after a tedious illness, aged forty-six years. The deceased was formerly a demonstrator and lecturer on anatomy in the Ledwich School of Medicine, and afterwards became one of the visiting surgeons to Jervis-street Hospital; he was finally elected a member of the surgical staff of the Mater Misericordiæ Hospital, which appointment he held at the time of his death. He had been in very bad health for a considerable time past, and those who knew him intimately were aware of the inevitably fatal nature of his malady. His contributions to surgery included a case of Genu Valgum, operated on by Ogston's method successfully. Mr. Kilgarriff leaves a widow and family to mourn his untimely decease.

PROF. HANS GIERKE.

THE University of Breslau has lost one of the most popular of its medical staff in Dr. Gierke, who died on the 8th inst. in the Maison de Santé at Schöneberg, near Berlin. Hans Paul Bernhard Gierke, brother of the well-known Professor of Law in the University of Heidelberg, was born on the 19th of August, 1847, at Stettin. After completing his academic studies he came before the public with his first scientific work, "Ueber das Athmungscentrum" ("On the Respiratory Centre"). At the instance of Dr. Kölliker, he went in 1876 to Tokio to fill the Chair of Anatomy in the Imperial University of the Japanese capital. By that time, however, the seeds of a lingering malady had declared themselves, and in 1881 he returned home to assist Professor Heidenhain in the Physiological Institute at Breslau, where he was appointed in the following year Extraordinary Professor. Advancing illness compelled him to seek a more southern climate, but the change brought him no benefit. Before his death his valuable collection of Japanese objects was exhibited in the Industrial Art Museum of Berlin, while his rich assortment of Japanese pictures was purchased by the State for the Ethnographic Museum of the same city.

BRIGADE SURGEON TYLER OUGHTON.

MR. TYLER OUGHTON, whose death occurred from heart disease on the 13th inst., was born in Jamaica in 1836, and received his professional education at St. Thomas's Hospital. Having become a Member of the Royal College of Surgeons of England in 1858 and a Licentiate of the Society of Apothecaries in 1859, he entered the army in 1861, and served for several years in Western Africa and in India. He was engaged in the last Ashantee and Afghanistan wars, and marched with General Roberts from Cabul to Candahar, taking part in the subsequent victory. In 1881 he retired from the service and devoted his remaining years to scientific study, the result of which is contained in a series of articles on Vision contributed to the columns of this journal.

ACCIDENT TO MR. WILLIAM ADAMS.—We regret to learn that Mr. William Adams met with a rather serious accident at the Colonial and Indian Exhibition on Thursday last. In walking through one of the courts he stumbled over a chair, and fell against a glass case, wounding his hand and wrist somewhat severely.

PRESENTATION.—The patients and other friends of Dr. Douglas Reid, of Helensburgh, recently presented that gentleman with a very handsome horse and brougham, as an indication of the high esteem in which he is held throughout the district in which he practises.

Medical News.

UNIVERSITY OF CAMBRIDGE.—The following gentlemen have passed the examination for the degree of B.S.:—

G. Bulstrode, Emmanuel; R. Coombe, Caius; B. Evans, King's; G. C. Fitzgerald, Caius; A. S. Percival, Trinity; T. Rushbrooke, Christ's; S. S. Spriggs, Caius; E. M. Sympson, Caius; R. J. Tatham, Clare; G. Winfield-Roll, Christ's.

At a congregation held on the 13th inst., the Vice-Chancellor, Sir George Paget, Professor Humphry, Professor Latham, Professor Macalister, Dr. Donald Macalister, Professor Liveing, Professor Foster, and Mr. Trotter, Trinity, were appointed a syndicate to take into consideration the Medical Acts Amendment Bill, and to take such steps with reference thereto as they may think fit. Dr. F. B. de Chaumont (Edinburgh), Dr. Alfred Carpenter (London), Dr. Hubert Airy (Trinity), and Sir Charles A. Cameron, President of the Royal College of Surgeons in Ireland, were appointed examiners in State Medicine.

SOCIETY OF APOTHECARIES.—The following gentlemen passed the examination in the Science and Practice of Medicine, Surgery, and Midwifery, and received certificates to practise, on the 13th inst.:—

Alexandrian, Nazareth, Scutari, Constantinople.
Atkinson, John Lancelot, St. George's-square.
Barnes, Robert Newton, Ash House, Bishop's Waltham, Hants.
Bell, John Charles, Merlin, Ontario, Canada.
Englebach, Frederick George, Richmond, Surrey.
Jones, Josiah Herbert, Hoe-street, Walthamstow.

THE thirty-fourth annual meeting of the governors of the Hospital for Sick Children was held on the 19th inst.

AT a public dinner held on the 19th inst., on behalf of the funds of the Public Dispensary, Stanhope-street, Clare-market, subscriptions to the amount of £320 were announced.

ON the 19th inst., the fortieth annual meeting of the supporters of the House of Charity, the oldest convalescent home, was held, when a satisfactory report was presented and adopted. The income last year amounted to £1853.

A BAZAAR in aid of the People's Palace for East London (the Beaumont Trust) will be held in the Duke of Wellington's Riding School at Knightsbridge on Wednesday, June 2nd, and two following days.

A SUB-COMMITTEE of the Rivers Committee of the Manchester City Council has been appointed to take into consideration a scheme for dealing with the whole of the sewage of the city.

COTTAGE HOSPITAL FOR FAVERSHAM.—MRS. W. T. Townend Hall, lately of Syndale Park, Faversham, has generously offered to provide funds for the building of a cottage hospital for the town, in memory of her late husband, who died some twelve months since.

ON the 19th inst., at the twentieth annual meeting of the Governors of the Victoria Hospital for Children, Queen's-road, Chelsea, it was reported that the number of in-patients admitted last year was 550, and total attendances of out-patients 30,898, and at the convalescent branch at Margate 146.

ROYAL COLLEGE OF SURGEONS OF ENGLAND.—The Library of the College will be closed on Thursday, the 27th inst., for the Clinical Examination; and on Friday, the 28th inst., at 4 o'clock, for the *viva-voce* part of the examination for the Final Fellowship, for which twenty-eight candidates have entered their names.

METROPOLITAN FREE HOSPITAL. — The fiftieth anniversary of this institution was commemorated by a banquet on the 12th inst., when the chairman, Mr. Cyril Flower, M.P., stated that the new building in Kingsland-road was constructed to contain 160 beds, one-fourth of which would specially be set apart for the accommodation of patients of the Jewish persuasion. The out-patient department is already in full operation. The amount required for carrying on the work of the hospital is from £8000 to £9000 per annum. During the evening subscriptions amounting to nearly £2200 were announced.

MORLEY HOSPITAL.—On the 17th inst., a bazaar was opened in aid of the funds of this seaside convalescent home for the working men of London, which was established in 1883, at St. Margaret's Bay, near Dover. The object of the bazaar is to remove a debt of £2000 incurred in the purchase and furnishing of premises suitable for the purpose of the home, and this incubus being removed, it is estimated that the institution will be self-supporting.

ST. JOHN AMBULANCE ASSOCIATION.—An ambulance class composed of officers and non-commissioned officers of the 45th Regimental District Headquarters was examined at Derby on the 6th inst. by Dr. J. W. Martin, who reports very favourably of the manner in which all the pupils passed the examination. The examiner lays great stress on the importance of this subject to all branches of this service, and strongly urges the formation of similar classes elsewhere.

THE HOSPITALS ASSOCIATION.—On the 19th inst. the sixth general meeting of the members of this association was held, when a paper on the Ambulance Arrangements of an English Army was read by Surgeon-Major Evatt. The formation of a Volunteer Medical Staff Corps to supplement the existing regimental surgeons and ambulance men and to provide bearer companies and field hospitals for the Volunteer forces was strongly advocated. A discussion followed.

NORTH-EASTERN HOSPITAL FOR CHILDREN, HACKNEY-ROAD, E.—At the eighteenth annual meeting of the supporters of this hospital on the 17th inst., it was reported that the institution was in a much better position than last year, the income showing a slight increase over the amount received in the preceding year. The number of in-patients relieved was 653, as against 620 in 1884, and the out-patients numbered nearly 1000 per week. Funds are still required to pay off a debt of £1000 to the bankers, and for this the committee earnestly appeal.

M. PASTEUR.—It is reported that M. Pasteur has been so favourably impressed by the scientific intelligence of an American physician, Dr. Valentine Mott, of New York, that he has, for the first time, broken through his rule not to allow his virus go out of his own hands. The Czar has just conferred on M. Pasteur the Order of St. Anne of the First Class, with diamond insignia; and other decorations on the physicians and surgeons who co-operated with the eminent *savant* in the treatment of the wolf and dog-bitten Russians.

PROVIDENT SURGICAL APPLIANCE SOCIETY.—The annual dinner in aid of the funds of this institution was held on the 19th inst., when it was stated by the Duke of Portland, who occupied the chair, that not less than 4300 instruments, some of them of a most expensive character, were given to poor people last year, and the total number of instruments which had been distributed since the formation of the Society was more than 40,000. A list of subscriptions amounting to £1072, as against £950 at the last dinner, was announced by the secretary.

COLONIAL AND INDIAN EXHIBITION.—The Reception Committee, recently formed by direction of H.R.H. the Prince of Wales, Executive President of the Royal Commission, is desirous of offering a fitting and cordial reception to Colonial and Indian visitors of distinction during their visit to England, by facilitating, so far as may be possible, their arrangements for visiting places of special interest in the United Kingdom. To enable the Committee to do this funds are required; and those who may be desirous of co-operating are invited to subscribe to the object in view. Subscriptions can be sent to the London and Westminster Bank, West-end Branch, St. James's-square, S.W., or to Mr. Arthur Hodgson, C.M.G., General Secretary, at the office of the Reception Committee, "Old London," Exhibition Buildings, South Kensington, or to Mr. H. Trueman Wood, the Treasurer, Society of Arts, John-street, Adelphi. Cheques should be crossed London and Westminster Bank, West-end Branch.

THE POLLUTION OF THE LEA.—At the meeting of the Select Committee appointed to report on the purification of the River Lea on the 14th inst., Mr. Grantham, engineer to the Enfield Board of Health, described the drainage works and sewage farm at Enfield. He stated that the farm consisted of ninety-five acres, and the tanks were capable of containing 480,000 gallons of sewage, which was carried to all parts of the farm by means of pumps. In dry weather the sewage matter pumped upon the farm was 480,000 gallons, but in wet weather the quantity increased to as much as 2,200,000 gallons. As far as Enfield was concerned, if the existing intervening cut was widened and deepened it would be satisfactory; but it would be a more desirable scheme, if the cost was not wholly disproportioned to the advantage, to have the sewage kept out of the river. Mr. Bailey Denton having given evidence as to a scheme which he prepared some years ago for the drainage of the valley of the Lea, the committee adjourned.

BANQUET AT THE ACADEMY OF MEDICINE, IRELAND. Dr. Robert McDonnell, President of the Academy of Medicine, Dublin, had the honour of entertaining on Wednesday, the 12th inst., at dinner, at his residence, Merrion-square, his Excellency the Lord-Lieutenant and his Serene Highness Prince Edward of Saxe-Weimar, Commander of the Forces in Ireland. The following representatives of the different sections of the Academy of Medicine and other gentlemen were invited to meet his Excellency:—Dr. Cruise, Medical Section; Sir Charles Cameron, Surgical Section; Dr. More Madden, Obstetrical Section; Dr. Little, Pathological Section; Dr. Duffy, Treasurer; Dr. Thompson, Secretary; Col. Turner, Private Secretary to the Lord-Lieutenant; the Provost of Trinity College; Sir Robert Hamilton, Assistant Secretary; Sir Patrick Keenan, Commissioner of National Education; Mr. Robinson, Vice-President of the Local Government Board; Mr. McCausland; and the Aides-de-Camp of the Lord-Lieutenant and the Commander of the Forces. Twenty in all sat down to dinner.

BRITISH ASSOCIATION.—The programme of arrangements for the Birmingham meeting of this Association has just been issued. It will meet on Wednesday, Sept. 1st, when Sir Lyon Playfair resigns the presidency, which will be assumed by Sir William Dawson, C.M.G., F.R.S., the eminent Canadian geologist, Principal of M'Gill College, Montreal. The local secretaries are Mr. J. Barham Carslake, the Rev. D. H. W. Crosskey, and Mr. C. J. Hart; and the local treasurer is Mr. J. D. Goodman. The following are the presidents of the various sections:—*(a)* Mathematical and Physical Science, Professor G. H. Darwin, F.R.S.; *(b)* Chemical Science, William Crookes, F.R.S.; *(c)* Geology, Professor S. G. Bonney, F.R.S.; *(d)* Biology, William Carruthers, F.R.S.; *(e)* Geography, General Sir F. J. Goldsmid, K.C.S.I., C.B.; *(f)* Economic Science and Statistics, John Biddulph Martin, F.S.S.; *(g)* Mechanical Science, Sir James N. Douglass, M.I.C.E.; *(h)* Anthropology, Sir George Campbell, K.C.S.I., M.P. On Thursday evening, Sept. 2nd, there will be a *soirée*; on Friday, the 3rd, at 8.30 P.M., a discourse on the "Sense of Hearing," by Professor W. Rutherford, M.D., F.R.S.; on Monday evening, the 6th, at 8.30, a discourse on "Soap Bubbles," by A. W. Rücker, M.A., F.R.S.; and on Tuesday evening, the 7th, at 8 P.M., a *soirée*.

UNIVERSITY COLLEGE.—On the 19th inst., the prizes in connexion with the Faculty of Medicine were distributed by the Earl of Kimberley. In the class of Surgery the gold medal was won by Mr. H. H. Brown, and the silver medals were presented to Mr. E. R. St. C. Corbin and Mr. S. C. Holder. In the senior class of Physiology, gold medals were awarded to Mr. H. M. Fernando and Mr. J. L. Firth; in the junior class, a silver medal was awarded to Mr. C. A. Kent. In the senior class of Anatomy, the gold medal was gained by Mr. J. B. M. White, the first silver medal by Mr. H. M. Evans, and the second silver medal by Mr. W. H. Tate; in the junior class, the silver medal was awarded to Mr. L. E. Hill. In Medicine, the gold medal was awarded to Mr. J. E. Rennie, and silver medals to Mr. K. N. Bahadhurji and Mr. W. P. May. In Practical Chemistry, the gold medal was awarded to Mr. H. A. Eccles, the first silver medal to Mr. H. Tilley, and the second to Mr. A. Vaughan. In Pathological Anatomy, the Tuke medal was gained by Mr. S. E. Holder. In the senior class of Clinical Medicine the following Fellowes medals were awarded:—Gold to Mr. Sydney E. Holder, silver to Mr. J. J. Lister and Mr. F. S. Toogood; in the junior class, the silver Fellowes medal was awarded to Mr. C. W. Jecks. In Clinical Dental Surgery, the prize was gained by Mr. E. R. St. C. Corbin. A large number of certificates were also awarded.

Medical Appointments.

Intimations for this column must be sent DIRECT *to the Office of* THE LANCET *before 9 o'clock on Thursday Morning at the latest.*

BAILEY, J. RIDLEY, M.B.Edin., has been reappointed Medical Officer of Health for Bilston.

BLACKWOOD, ARTHUR, M.D., M.Ch., has been appointed Assistant Medical Officer to the Liverpool Parish Hospital, vice W. Piercy Fox, resigned.

CHEESMAN, G. E. A., L.R.C.P.Ed., L.S.A.Lond., has been appointed Medical Officer for the First District of the Lymington Union.

DAVIES, D. S., M.B.Lond., M.R.C.S., L.R.C.P.Lond., has been appointed Medical Officer of Health to the City and Port Sanitary Authority of Bristol, vice Davies, resigned.

DAVIES, ELEAZER, L.R.C.S., L.R.C.P.Ed., has been appointed Medical Officer for the Pontlottyn District of the Merthyr Tydfil Union.

FRASER, ALEXANDER G., M.A.Aber., M.B., C.M.Edin., has been appointed Honorary Physician to the Hulme Dispensary, vice G. J. Haslam, M.D., M.R.C.S., resigned.

HINDS, FRANK, M.B., B.S.Lond., M.R.C.S., has been appointed Junior Resident Medical Officer to the Hospital for Sick Children, Great Ormond-street, W.C.

MAUNSELL, FRANCIS J., L.K.Q.C.P.I., L.R.C.S.I., has been appointed Medical Officer for the Tir Phil District of the Merthyr Tydfil Union.

MOIR, JOHN, L.R.C.P.Ed., Medical Officer to the West Ham Union Infectious Diseases Hospital, has been reappointed Medical Officer to the West Ham Local Board Cottage Hospital, Plaistow, E.

MORSE, SYDNEY, L.R.C.S., L.R.C.P.Ed., has been appointed Medical Officer for the Cannock District of the Cannock Union.

PARRY-JONES, M., M.D., B.S.Lond., M.R.C.S., L.S.A.Lond., has been appointed Resident Surgeon to the Pinxton Collieries, Alfreton.

PARTINGTON, WILLIAM, M.B., C.M.Glas., has been appointed Medical Officer for the Workhouse and the Tunstall District of the Wolstanton and Burslem Union.

RAKE, HERBERT VAUGHAN, M.R.C.S., L.S.A.Lond., has been appointed Medical Officer of Health for the Fordingbridge Union.

THOMAS, J. L., M.D.Aber., has been appointed Physician to the Royal South Hants Infirmary, vice Dr. Broster, deceased.

Births, Marriages, and Deaths.

BIRTHS.

BLACKBURN.—On the 12th inst., at Margravine-gardens, West Kensington, the wife of H. B. Blackburn, M.R.C.S., of a daughter.

GRAHAM.—On the 6th ult., at Bindjey, Sumatra, the wife of J. Campbell Graham, M.D., of a daughter.

MORRISSON.—On the 17th inst., at Strathallan, St. Saviour's-road, Brixton-hill, the wife of Stammers Morrisson, L.R.C.P.Lond., M.R.C.S., of a daughter.

MARRIAGES.

BARTON—GASSIOT.—On the 15th inst., at St. Mary Abbott's Church, Kensington, A. B. Barton, M.D., of Loxham-gardens, Kensington, to Harriet, second daughter of the late J. P. Gassiot, J.P., F.R.S.

HICKS—POTTER.—On the 13th inst., at Madeira, at the British Consulate, and afterwards at the English Church, Frederick John Hicks, M.A., M.B.Oxon., to Sarah Emma (Dollie), eldest daughter of the late Philip Potter, of Larklands, Ilkeston.

OLIVER—BURFORD.—On the 13th inst., at the Wesleyan Church, Hampstead, Francis George Oliver, L.R.C.P.Lond., M.R.C.S., eldest son of Frank Oliver, Esq., of Negapatam, India, to Kate, youngest daughter of Mr. James Burford, of Norway House, Hampstead, N.W.

REED—HIGHAM.—On the 13th inst., at Charles Church, Plymouth, William Cash Reed, M.D., to Eleanor Winifred Maude, youngest daughter of the late James Higham.

RUTHERFORD—TWEDDELL.—On the 18th inst., at the Parish Church, Jesmond, Newcastle-on-Tyne, Robert Leonard Rutherford, M.D., of Exeter, to Mary Alice, third daughter of the late George Tweddell, of West Hartlepool.

SHEPERD—BEALE.—On the 13th inst., at Christ Church, Hoxton, London, Robert J. Sheperd, L.R.C.S.I., L.K.Q.C.P.I., of Pemberton House, Hay, Breconshire, to Mary Kathleen, daughter of the late George Beale, Esq., of Dublin.

DEATHS.

HANDS.—On the 17th inst., at Shepherd's-bush-road, Joseph Hands, M.R.C.S., late of The Grove, Hammersmith.

LIVESEY.—On Feb. 1st (of exhaustion, following rheumatic fever), Ernest Livesey, M.R.C.S., L.S.A.Lond.

MEDLEY.—On March 27th, on board s.s. *Glengarry*, off Hongkong, Harold Thomas Dupuis Medley, M.R.C.S., L.R.C.P., in his 28th year.

ORR.—On the 15th inst. (very suddenly), at Albany-place, Glasgow, Robert Scott Orr, M.D., aged 67.

OUGHTON.—On the 13th inst., at 20, Buckingham-road, Brighton (after a short illness), Brigade-Surgeon Tyler Oughton, aged 49 years.

STUDDERT.—On the 14th inst., at Liverpool, Reginald Waller Studdert, M.B., B.C.L., aged 24.

TREACHER.—On the 14th inst., at Kew, John Gavaron Treacher, M.R.C.S., late of Labuan, aged 72.

N.B.—A fee of 5s. is charged for the Insertion of Notices of Births, Marriages, and Deaths.

Medical Diary for the ensuing Week.

Monday, May 24.

ROYAL LONDON OPHTHALMIC HOSPITAL, MOORFIELDS.—Operations, 10.30 A.M., and each day at the same hour.

ROYAL WESTMINSTER OPHTHALMIC HOSPITAL.—Operations, 1.30 P.M., and each day at the same hour.

ST. MARK'S HOSPITAL.—Operations, 2 P.M.; Tuesdays, same hour.

CHELSEA HOSPITAL FOR WOMEN.—Operations, 2.30 P.M.; Thursday, 2 P.M.

HOSPITAL FOR WOMEN, SOHO-SQUARE.—Operations, 2 P.M., and on Thursday at the same hour.

METROPOLITAN FREE HOSPITAL.—Operations, 2 P.M.

ROYAL ORTHOPÆDIC HOSPITAL.—Operations, 2 P.M.

CENTRAL LONDON OPHTHALMIC HOSPITALS.—Operations, 2 P.M., and each day in the week at the same hour.

SOCIETY OF ARTS.—8 P.M. Dr. B. W. Richardson: Animal Mechanics (Cantor Lecture).

Tuesday, May 25.

GUY'S HOSPITAL.—Operations, 1.30 P.M., and on Friday at the same hour. Ophthalmic Operations on Mondays at 1.30 and Thursdays at 2 P.M.

ST. THOMAS'S HOSPITAL.—Ophthalmic Operations, 4 P.M.; Friday, 2 P.M.

CANCER HOSPITAL, BROMPTON.—Operations, 2.30 P.M.; Saturday, 2.30 P.M.

WESTMINSTER HOSPITAL.—Operations, 2 P.M.

WEST LONDON HOSPITAL.—Operations, 2.30 P.M.

ROYAL INSTITUTION OF GREAT BRITAIN.—3 P.M. Prof. Arthur Gamgee: The Function of Circulation.

SOCIETY OF ARTS.—8 P.M. Mr. G. Gordon Hake: Cyprus since the British Occupation.

ANTHROPOLOGICAL INSTITUTE OF GREAT BRITAIN AND IRELAND.—8.30 P.M. Mr. Reginald Stuart Poole: The Ancient Egyptian Classification of the Races of Man.

ROYAL MEDICAL AND CHIRURGICAL SOCIETY.—8.30 P.M. Mr. Lockwood: The Morbid Anatomy and Pathology of Encysted and Infantile Hernia.—Dr. Fletcher Beach: A case of Imbecility with Choreic Movements.—Dr. Steavenson and Mr. Bruce Clarke: The Treatment of Stricture of the Urethra by Electrolysis.

Wednesday, May 26.

NATIONAL ORTHOPÆDIC HOSPITAL.—Operations, 10 A.M.

MIDDLESEX HOSPITAL.—Operations, 1 P.M.

ST. BARTHOLOMEW'S HOSPITAL.—Operations, 1.30 P.M.; Saturday, same hour. Ophthalmic Operations, Tuesdays and Thursdays, 1.30 P.M.

ST. MARY'S HOSPITAL.—Operations, 1.30 P.M. Skin Department, Tuesdays and Fridays, 9.30 A.M.

ST. THOMAS'S HOSPITAL.—Operations, 1.30 P.M.; Saturday, same hour.

LONDON HOSPITAL.—Operations, 2 P.M.; Thursday & Saturday, same hour.

GREAT NORTHERN CENTRAL HOSPITAL.—Operations, 2 P.M.

SAMARITAN FREE HOSPITAL FOR WOMEN AND CHILDREN.—Operations, 2.30 P.M.

UNIVERSITY COLLEGE HOSPITAL.—Operations, 2 P.M.; Saturday, 2 P.M. Skin Department, 1.45 P.M.; Saturday, 9.15 A.M.

ROYAL FREE HOSPITAL.—Operations, 2 P.M., and on Saturday.

KING'S COLLEGE HOSPITAL.—Operations, 3 to 4 P.M.; and on Friday, 2 P.M.; and Saturday, 1 P.M.

BRITISH GYNÆCOLOGICAL SOCIETY.—8.30 P.M. Specimens will be shown by Mr. Lawson Tait and others.—Dr. Fancourt Barnes: On a case of Pyometra.—Dr. Grigg on Pyosalpinx in the Puerpera. Council Meeting at 8 P.M.

Thursday, May 27.

ST. GEORGE'S HOSPITAL.—Operations, 1 P.M.

ST. BARTHOLOMEW'S HOSPITAL.—Surgical Consultations, 1.30 P.M.

CHARING-CROSS HOSPITAL.—Operations, 2 P.M.

NORTH-WEST LONDON HOSPITAL.—Operations, 2.30 P.M.

ROYAL INSTITUTION OF GREAT BRITAIN.—3 P.M. Professor Alexander Macalister: Habit as a Factor in Human Morphology.

Friday, May 28.

ST. GEORGE'S HOSPITAL.—Ophthalmic Operations, 1.30 P.M.

ROYAL SOUTH LONDON OPHTHALMIC HOSPITAL.—Operations, 2 P.M.

CLINICAL SOCIETY OF LONDON.—8.30 P.M. Report of Urinary Tests Committee. Dr. Caton (Liverpool): Aneurysm of Hepatic Artery.—Mr. R. W. Parker: On the Treatment of Nævus by Excision, to which is appended a Clinical Analysis of 564 cases of Nævus, together with the Microscopic Nature of this Condition.—Mr. Victor Horsley: A case of Suppuration of the Mastoid Cells complicated by Thrombosis of the Right Lateral Sinus and Septic Embolism of the Heart and Left Lung, in which Recovery followed Trephining of the Mastoid Process, with remarks on the Prevention of Septic Embolism in such cases.—Dr. Hale White: On Simultaneous Inflammation of several Serous Membranes.

ROYAL INSTITUTION OF GREAT BRITAIN.—9 P.M. Prof. Oliver Lodge: Electrical Deposition of Dust and Smoke.

Saturday, May 29.

MIDDLESEX HOSPITAL.—Operations, 2 P.M.

ROYAL INSTITUTION OF GREAT BRITAIN.—3 P.M. Prof. G. G. Stokes: Light, with special reference to Effects resulting from its Action on Various Substances.

METEOROLOGICAL READINGS.

(Taken daily at 8.30 a.m. by Steward's Instruments.)

THE LANCET Office, May 20th, 1886.

Date.	Barometer reduced to Sea Level and 32° F.	Direction of Wind.	Dry Bulb.	Wet Bulb.	Solar Radia in Vacuo.	Max. Temp. Shade.	Min. Temp	Rain fall.	Remarks at 8.30 A.M.
May 14	29·32	W.	48	45	77	52	45	·12	Cloudy
,, 15	29·75	N.W.	48	42	99	56	41	·03	Cloudy
,, 16	29·86	W.	52	50	...	55	45	·09	Raining
,, 17	29·81	W.	54	53	...	60	51	·23	Raining
,, 18	29·77	W.	50	45	112	70	53	...	Cloudy
,, 19	30·00	S.W.	55	51	72	57	49	...	Overcast
,, 20	29·88	S.E.	58	55	...	...	51	...	Cloudy

Notes, Short Comments, & Answers to Correspondents.

It is especially requested that early intelligence of local events having a medical interest, or which it is desirable to bring under the notice of the profession, may be sent direct to this Office.

All communications relating to the editorial business of the journal must be addressed "To the Editor."

Lectures, original articles, and reports should be written on one side only of the paper.

Letters, whether intended for publication or private information, must be authenticated by the names and addresses of their writers, not necessarily for publication.

We cannot prescribe or recommend practitioners.

Local papers containing reports or news-paragraphs should be marked.

Letters relating to the publication, sale, and advertising departments of THE LANCET *to be addressed "To the Publisher."*

We cannot undertake to return MSS. not used.

ALCOHOL IN WORKHOUSES.

THE return required by the Local Government Board, showing the quantities of wines, spirits, and malt liquors consumed in the workhouses for the year 1885, was laid before the guardians of the St. Saviour's (Southwark) Union on the 13th inst. The particulars were as follows:—Christchurch workhouse—spirits, 456 pints; wines, 55 pints; malt liquors, 2218 gallons. The average number of inmates was 506. St. George's Workhouse—spirits, 58 pints; wines, *nil*; malt liquors, 2553 gallons. The average number of inmates was 424. Newington Infirmary—spirits, 506 pints; wines, 222 pints; malt liquors, 5356 gallons. The average number of inmates was 1020.

H. S. (Birmingham).—"Crematorium," meaning the place in which cremation is practised, is a correct, though quite unnecessary coinage. It occurs in no Latin author, and ought to be replaced by the shorter, equally expressive, and quite classical word, "ustrinum."

Mr. Armstrong (Newcastle-on-Tyne) will find his letter inserted in our issue of April 10th, p. 715.

Mr. Lawson Tait's paper will appear very shortly.

A CASE OF AMNESIC APHASIA.

To the Editor of THE LANCET.

SIR,—The following case of amnesic aphasia (uncomplicated) may be of interest.

B. D——, aged fifty-nine, in February last suddenly lost the power of expressing his thoughts in words. On seeing him the following morning, he referred an acute pain to the left temporal region; there was no paralysis of any muscles, and the eyes were both normal in all respects. On examination, a mitral systolic murmur was detected; he also suffered from chronic dyspepsia; the other organs were all healthy. His vocabulary consisted of a few monosyllabic words; he was also unable to read, write, or use figures. He could, however, make himself understood by signs, though the few words he used had no reference to these signs. He was kept quiet and treated with bromide of potassium. Since that time he has greatly improved; he can now talk fairly well when not excited or exhausted; he reads the newspaper, but cannot articulate long or use common words; he can write and add up figures in the course of his business, but is utterly powerless to remember the names of people or places, and still complains of headache. The pain in the left temporal region is doubtless referable to lesion of the convolution of Broca; while from the researches of Dr. Hughlings Jackson it seems highly probable that the injury was caused by plugging of the middle cerebral artery of the left side by an embolus derived from valvular disease of the heart.—I am, Sir, yours truly,

Kendal, May 4th, 1886. R. W. LEEMING, B.A., M.B. Cantab., &c.

PERIODICAL VARIATIONS IN ATMOSPHERIC BACTERIA.

M. MIQUEL stated at the last session of the Paris Society of Public Medicine that in a series of observations he had made on the periodical variations of atmospheric bacteria he found the maximum number occurred between six and nine o'clock in the morning, and the minimum about two o'clock in the afternoon. A second maximum occurred about seven o'clock in the evening, and a second minimum at two o'clock in the morning. The maximum was greater in the town than in the country. The practical advice to which his experiments point is to ventilate one's rooms, more particularly early in the afternoon and in the middle of the night.

Poison.—Vide THE LANCET, vol. ii., 1885, pp. 863, 906, 1070, 1119, and 1167. See also Martindale's little book on Coca and Cocaine.

TEREBENE RASH.

To the Editor of THE LANCET.

SIR,—The following case, which recently came under my observation, ought, I think, to be placed on record.

John K——, aged sixty, was ordered to take five-minim doses of terebene four times a day for chronic bronchitis, from which he has suffered for many years. After taking six doses of the medicine (thirty drops in all), he had to desist, on account of a profuse bright-red, papular rash, intensely itchy, making its appearance, first on the left hand, and then on both ankles, extending up the legs to the knees. The hand was likewise very much swollen. That this condition was due to the terebene was proved by the retrogression of the eruption coinciding with the discontinuance of the medicine. This idiosyncrasy, the patient informed me, was observed about thirty years ago, when, having sprained his wrist, he was recommended to apply turpentine as a liniment. The result of this was the appearance of an eruption of similar character to the foregoing, his arm becoming at the same time so swollen as to incapacitate him for work for a whole fortnight. With the exception of the skin trouble, no other inconvenience has ever arisen from the use of the drug.

I am, Sir, yours truly,

May 15th, 1886. ORMOND H. GARLAND, M.B., M.R.C.P. Ed., Hon. Physician to Leith Hospital, &c.

Dr. Unna (Hamburg).—A short article on the subject would be accepted.

Mr. Maddock should apply to the Secretary to the Board.

Mr. Clemow (Lynton).—Yes.

"THE USE OF COCAINE IN OPERATIONS FOR PILES."

To the Editor of THE LANCET.

SIR,—With reference to Dr. Pritchard's claim for priority in the use of cocaine for operations on piles (THE LANCET, March 13th, p. 527), allow me to state that on Dec. 26th, 1885, I used a 4 per cent. solution in the removal of an external pile from a negro, with good result. Earlier in the same day I had occasion to have an abscess in the back of my own neck opened, so asked a medical friend to paint the skin with some of the same solution before making the incision. Beyond a slight scratching, I experienced no sensation as the knife divided the skin.

I am, Sir, yours truly,

April 27th, 1886. BEAVEN RAKE, M.D. Lond., Government Medical Officer, Trinidad.

Dr. B. W. Jones (Vulcan, Mich.).—The name and address of the patentees are given in the notice of the apparatus.

Subscriber.—Will our correspondent kindly repeat his questions.

"HOSPITAL ETIQUETTE."

To the Editor of THE LANCET.

SIR,—In fairness to the matron, your correspondent, "M.B. Edin.," ought to quote the rules for house-surgeon and matron of his infirmary. Trained or not, the committee appointed this lady upon certain conditions, and before accepting office the house-surgeon ought to have thoroughly understood these rules. Instead of sheltering himself under your pages, and thus holding the matron up to public ridicule, he should have laid the matter before his committee. The rules of metropolitan hospitals and provincial infirmaries are two very different matters.

I am, Sir, yours truly,

May 15th, 1886. INTERESTED.

A Young Practitioner has not enclosed his card.

Mr. F. Treves.—In an early number.

RINGWORM IN A NEW-BORN INFANT.

To the Editor of THE LANCET.

SIR,—In reference to the two instances cited in THE LANCET of ringworm in new-born infants, I may also add my quota to the cases of your correspondents. On April 13th I attended a young woman in her confinement, and a few days afterwards the nurse drew my attention to a small ringworm, about the size of a sixpenny-piece, on the scalp. One application of tincture of muriate of iron cured it. I may say that tincture of muriate of iron is almost a specific in ringworm.

I am, Sir, yours faithfully,

York, May 19th, 1886. T. CAMPBELL MACCORMAC (Student).

NEWSPAPERS AND PERIODICALS OF JAPAN.

FROM some recently-published statistics of the Japanese press it appears that thirty-seven publications are devoted to matters connected with education, and that these have a total circulation of 42,649 per month. There are seven medical papers, with a monthly circulation of 15,514; nine relating to sanitary matters, with a circulation of 8195, and two on pharmacy. There are seven devoted to various branches of science, with a circulation of 2428; but to these must be added twenty-two engaged in popularising science, with a total circulation of 70,860.

Dr. Murphy (Sunderland).—Yes, soon.

"INFANT FEEDING: COD-LIVER OIL."

To the Editor of THE LANCET.

SIR,—In reference to Mr. S. Yeldham's letter in your issue of May 1st, recommending the administration of cod-liver oil in small quantities to infants to whom no kind of artificial food is of benefit, I wish to say that I have for some time been in the habit of ordering cod-liver oil in such cases by merely floating it on the milk. But since having seen Mr. Yeldham's letter, I have adopted his method, which is certainly most useful and entirely successful.—I am, Sir, yours truly,

St. Mary Cray, May 15th, 1886. EDGAR D. CANE.

THE MALLING UNION.

OUR attention has been called to the way in which the vacancy in the No. 1 district of the Malling Union, caused by the resignation of the medical officer who formerly held the post, has recently been filled up. If the facts are as stated by our correspondent, we have no hesitation in saying that he has just cause of complaint, and we are not surprised that the Central Board has thus far declined to confirm the appointment.

Mr. W. O. Allison (New York).—We cannot exchange.

"SANITARY WOOLLEN CLOTHING AND BEDDING."

To the Editor of THE LANCET.

SIR,—In your issue of May 1st you inserted a letter from me under the above heading, since which I have had almost daily inquiries asking me where the book, "Health Culture," and the articles referred to are to be obtained. Possibly you may allow me to say that the book (price 1s.) and all pertaining thereto may be had of the Dr. Jaeger Sanitary Woollen Clothing Co., Fore-street, London, E.C.

I am, Sir, yours faithfully,

St. Leonards-on-Sea, May 13th, 1886. JOHN PENHALL.

COMMUNICATIONS not noticed in our present number will receive attention in our next.

COMMUNICATIONS, LETTERS, &c., have been received from—Dr. Gowers, London; Dr. A. K. Chalmers, Mossend; Mr. E. D. Cane, St. Mary Cray; Dr. Chepmell, London; Dr. Caddy, London; Mr. W. H. Day, London; Dr. Newell; Mr. Porpa, London; Mr. F. C. Macoormac, York; Mr. H. T. Wood, London; Mr. Cousland, Swatow; Mr. Fry; Mr. B. Oughton, Brighton; Dr. B. Fenwick, London; Mr. Wharton Jones, Ventnor; Dr. Broadfoot, Greenock; Mr. Butler-Smythe, London; Dr. Mackey, Brighton; Mr. Nixon, London; Mr. Lawson Tait, Birmingham; Dr. G. Harley, London; Dr. H. Harvey, Wavertree; Mr. Wigmore, London; Mr. Milner, Godalming; Mr. Batty Tuke, Edinburgh; Mr. Magnus, London; Mrs. Theobald; Mr. J. B. Pike, Loughborough; Dr. Penhall, St. Leonards; Messrs. Burgoyne and Co., London; Mr. Clemor, Lyndon; Mr. Field, Bradford; Dr. Steele, Florence; Mr. Oliver; Mr. Harrison, Liverpool; Mr. Healy, Tamworth; Mr. Stanford, London; Dr. Geddie, Accrington; Mr. Gravatt, London; Mr. C. Bedford, London; Dr. Callanan, Dublin; Dr. Percy Kidd, London; Mr. Browne-Webber, Chapelizod; Mr. W. A. Holmes, Kingston; Dr. Whistler, London; Mr. E. Sheppard; Mr. Lawson Tait, Birmingham; Dr. Illingworth, Clayton-le-Moors; Dr. Albert Wilson, Leytonstone; Mr. A. Baines, London; Dr. Ashby, Manchester; Major-General Keating, London; Dr. Churton, Leeds; Dr. B. Rake, Trinidad; Dr. Woakes, London; Dr. Tily, Brentford; Mr. R. Heelis, Nottingham; Mr. Hogg, Wellington, N.Z.; Messrs. Arnold and Sons, London; Dr. Pedley, Rangoon; Mr. Woodland; Dr. B. W. Jones, Vulcan, U.S.A.; Mr. Jackman, Coggeshall; Dr. Bell Taylor, Nottingham; Dr. W. Curran, London; Mr. Garland, Leith; Dr. F. L. Benham, London; Dr. D. C. Hood, London; Messrs. Robertson and Scott, Edinburgh; Mr. Armstrong, Harperhey; Messrs. Woolley and Co.; Mr. Rushworth, Halifax; Mr. Keith, Edinburgh; Mr. Freeman, London; Mr. May, Sheffield; Mrs. Piggott, Preston; Messrs. Hogg and Son, London; Mr. Simon, Leamington; Messrs. Benjamin and Sons, London; Mr. Beissell, Aachen; Mr. Pitman, Paris; Mr. Baker, Newport; Mr. Arnott, Beverley; Dr. Cameron, Hendon; Mr. Ostell, Carlisle; Mr. Simpson, Reading; Dr. Davies, Sherborne; Dr. Tenant, Bathgate; Professor McKendrick, Glasgow; Messrs. Barter and Co., London; Mr. Thompson, London; Mr. Hunt, Hull; Dr. Ridge, Enfield; Mr. Harrison, Derby; Mrs. Rawlins, Clapham; Messrs. Lee and Martin, Birmingham; Mr. Saunders, Manchester; Messrs. Condy and Co., London; Mr. Inglish, Canterbury; Mr. Manning, Combe Martin; Mrs. Carless, Liverpool; Messrs. Maclachlan and Co., Edinburgh; Mr. Woodland, London; Mr. Morrison, Snaith; Mr. Gillander, Fort Rose; Messrs. Bennett Bros., Salisbury; Dr. Debout d'Estrées, Contrexéville; A. W.; Interested; Justitia; One who has served his time as a Pupil; A Graduate of Paris; Matron, Portsmouth Hospital; Boreas.

LETTERS, *each with enclosure*, are also acknowledged from—Dr. Drury, Darlington; Mr. Thwaites, Bristol; Mr. Ward, London; Mr. Levan, West Bromwich; Mr. Buckley, Stonehouse; Mr. Robinson, Sunderland; Mr. Nisbett, Helmsley; Mr. Davies, Newport; Messrs. Hunton and Co., Stockton-on-Tees; Mr. Paul, Liverpool; Messrs. Sumner and Co., Liverpool; Dr. Gillon, Wellington, N.Z.; Messrs. Treharne and Son, London; Mr. Cole, Holywell; Dr. Bailey, Marple; Mr. Terry, Winchester; Mr. Christmas, Hemel Hempsted; Messrs. Symes and Co., Liverpool; Mr. Arrowsmith, Bristol; Messrs. Loeflund and Co., London; Mr. Brockelbank, Islington; Dr. Eberle, Thirsk; Rev. A. J. D'Orsey; Dr. Habershon, London; Mr. Laskey; Messrs. Davis and Co., Newcastle-on-Tyne; Mr. Rutherford, Newcastle; Mr. Fletcher, Northwich; Dr. Wright, Finedon; Mr. Oliver, Sutton; Mr. Howard, Littleport; Mr. Davies, Bridgend; Mr. Gray, Exeter; Mr. Rideal, London; Mr. Dawe, Huddersfield; Mr. Eccles, Mold; Messrs. Christy and Co., London; Mr. Denham, Wareham; Messrs. Kilner and Co., London; Mr. Darke, London; Mr. White, London; Mr. Crofts, Church Gresley; Mr. Beckton, London; Mr. Vincent, Hulme; Mr. Thomas, Birmingham; Mr. Baxter, London; Mr. Northover, Tisbury; Dr. Rus, Eastbourne; Mr. Crasweller, Highbury; Vesta; X. Y. Z., Kingsland; Walden; D., Newcastle-on-Tyne; Secretary, Hull Infirmary; Delta, Liverpool; Member, London; M. A. B.; Medicus; B.A.; E. A., Ben Rhydding; Matron, Weston-super-Mare; Beta, Manchester; X. Y., Pontypridd; Omicron; M. C. J., Notting-hill; A. H.; M. N.; N. P., Southport; Matron, Grimsby; Physician, Bow; Chiswick; Surgeon, Salford; Fossil; Statim, Clapham; D. H., Deal; Shirley; Medicus, Bradford; W. A.; Surgeon; Medicus, Belfast; Medicus, York; R. H., Wigan; Omega, Brighton.

Bournemouth Observer, Windsor and Eton Gazette, St. Leonards Observer, Bristol Mercury, Christchurch Press, Lyttleton Times, Rangoon Gazette, Manchester Guardian, Brechin Advertiser, Kentish Gazette, Liverpool Evening Express, Holloway Press, Photographic News, Philanthropist, The State, Journal of the Society of Chemical Industry, &c., have been received.

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